

**Pinellas Environmental Restoration Project
Sitewide Environmental Monitoring
Quarterly Progress Report
for the
Young-Rainey STAR Center**

April through June 2002

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Prepared by
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Plates will be provided upon request. Click [plates](#) to request.

Plate 1 Sitewide Shallow Surficial Aquifer Contours

Plate 2 Sitewide Deep Surficial Aquifer Contours

Complete Appendices will be provided upon request. Click [appendices](#) to request.

[Appendix A Laboratory Reports—April 2002 Quarterly Results \(Table A-1 only\)](#)

[Appendix B Laboratory Reports for Northeast Site Treatment System—April to June 2002](#)

[Appendix C Laboratory Reports for WWNA—April to June 2002](#)

[Appendix D Analytical Results for Special Sampling Events](#)

[Appendix E Northeast Site Treatment System Historical Data Table \(Table E-1 only\)](#)

Acronyms and Abbreviations

AST	air stripper tower
BTEX	benzene, toluene, ethylbenzene, and xylene
°C	degrees Celsius
CMS	Corrective Measures Study
CMIP	Corrective Measures Implementation Plan
DCA	dichloroethane
DCE	dichloroethene
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
ft	feet
ft/ft	feet per foot
HSWA	Hazardous and Solid Waste Amendments
ICM	interim corrective measures
ICMS	Interim Corrective Measures Study
IMW	Interim Measures Work (Plan)
ITRD	Innovative Treatment Remediation Demonstration
IWNF	Industrial Wastewater Neutralization Facility
MCL	maximum contaminant level
MSL	mean sea level
µmhos/cm	micromhos per centimeter
µg/L	micrograms per liter
mg/L	milligrams per liter
mV	millivolt
NAPL	non-aqueous phase liquid
NTU	Nephelometric Turbidity Units
PCIC	Pinellas County Industrial Council
QA/QC	quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RPD	relative percent difference
SDWA	Safe Drinking Water Act
STAR	Science, Technology, and Research
STL	Severn Trent Laboratories
SWMU	solid-waste management unit
TCE	trichloroethene
TVOCs	total volatile organic compounds
VEA	vertical electrode array
VOCs	volatile organic compounds
WWNA	Wastewater Neutralization Area

1.0 Introduction

The Young-Rainey Science, Technology, and Research Center (STAR Center) is a former U.S. Department of Energy (DOE) facility constructed in the mid-1950s in Pinellas County, Florida. The 99-acre STAR Center is located in Largo, Florida, and lies in the northeast quarter of Section 13, Township 30 South, Range 15 East (Figure 1). The STAR Center, while owned by DOE, primarily manufactured neutron generators for nuclear weapons. Other products manufactured at the STAR Center have included radioisotopically powered thermoelectric generators, thermal batteries, specialty capacitors, crystal resonators, neutron detectors, lightning-arrestor connectors, and vacuum-switch tubes. In 1987, the U.S. Environmental Protection Agency (EPA) performed a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) at the site to gather information on potential releases of hazardous materials. In February of 1990, EPA issued a Hazardous and Solid Waste Amendment (HSWA) permit to DOE, enabling DOE to investigate and perform remediation activities in those areas contaminated by hazardous materials resulting from DOE operations. On March 17, 1995, DOE sold the facility to the Pinellas County Industrial Council (PCIC). The sales contract included clauses to ensure continued compliance with Federal, State, and local regulations while DOE remediates the site. On July 1, 1999, the PCIC was disestablished and ownership of the STAR Center changed to the Pinellas County government. In November 2000, the State of Florida received HSWA authorization from the EPA. The Florida Department of Environmental Protection (FDEP) issued a new HSWA Permit to DOE in January 2002.

Administration of DOE activities at the facility is the responsibility of the DOE Idaho Operations Office. Responsibility for environmental restoration activities, conducted under the EPA RCRA Corrective Action Program of 1984, was transferred from DOE's Pinellas Area Office to DOE's Grand Junction Office in October 1997. S.M. Stoller Corporation (Stoller), a prime contractor to the DOE Grand Junction Office, provides technical support to DOE for remediation and closure of all active solid-waste management units (SWMUs) on site.

Ground water monitoring and remediation are also ongoing at the 4.5 Acre Site. The 4.5 Acre Site is a parcel of land that was originally part of the DOE facility but was sold to a private individual. In 1984, ground water contamination was discovered at this site. Currently, DOE leases the site from the land owner and is actively pursuing ground water cleanup. The 4.5 Acre Site is under purview of Florida State regulations enforced by the FDEP. A summary of remediation activities can be found in the *Interim Remedial Action Quarterly Progress Report for the 4.5 Acre Site*.

The EPA RFA Report and the HSWA permit identified 15 sites at the former DOE facility that may have experienced environmental contamination as a result of past activities. Upon completion of the RCRA Facility Investigation, 11 of the 15 SWMUs were recommended by DOE and approved by EPA Region IV and the FDEP for no further action (DOE 1994). A twelfth site, the Former Pistol Range Site, was remediated in 1993 and recommended by DOE and approved by EPA Region IV and the FDEP for no further action.

Two additional SWMUs, the West Fenceline Site and the Wastewater Neutralization Area/ Building 200 (WWNA/Building 200), were identified after the HSWA permit was issued, bringing the total to 17 SWMUs that have been identified and investigated at the STAR Center. Remediation of the West Fenceline Site was completed in 1997 and DOE recommended, and EPA Region IV and FDEP approved, no further action. A Corrective Measures Study

(CMS)/Corrective Measures Implementation Plan (CMIP) was prepared and submitted in 1997 to EPA Region IV and FDEP to address the contamination at the WWNA/Building 200 Area.

Therefore, there are currently four sites that have contamination in the surficial aquifer ground water at levels in excess of protective standards. These four SWMUs, the Old Drum Storage Site (PIN06), the Industrial Drain Leaks-Building 100 Area (PIN12), the Northeast Site (PIN15), and the WWNA/Building 200 Area (PIN18), have been recommended for or are undergoing remediation activities. Two SWMUs, PIN06 and PIN12, are currently being remediated together because of their similar ground water contamination and proximity. These two SWMUs are collectively known as the Building 100 Area. [Figure 2](#) depicts the location of the four SWMUs.

Additional background information relative to each SWMU is briefly described below. This document also serves as the quarterly progress report for each of these four SWMUs. The results of monitoring activities, a summary of the treatment system performance, and a summary of ongoing and projected work are provided in this report.

1.1 Building 100 Area

The Building 100 Area (PIN06 and PIN12) is located in the southeast portion of the STAR Center. The Old Drum Storage Site is the former location of a concrete storage pad equipped with a drain and containment system used to store hazardous waste including dichloromethane (also known as methylene chloride), ignitable liquids, arsenic, and calcium chromate solids (DOE 1987a). Empty drums containing residual waste solvents were also stored in this area (DOE 1987b). The concrete pad was located near the northwest corner of Building 100. The pad was removed in October 1983 in accordance with an FDEP closure permit (DOE 1987a), and a closure report was submitted to the FDEP in August 1986 (DOE 1986). The decommissioning of the pad and the cessation of drum storage effectively removed the potential for a future contaminant source at PIN06.

Building 100 is the largest building at the STAR Center and covers approximately 11 acres. In the past, offices, laboratories, and production facilities for the DOE were housed in the building. SWMU PIN12 consists of the liquid waste drainage system serving Building 100. Four individual drainage systems (sanitary, chemical, health physics, and storm water) were present within the building. In 1989, all four drainage systems were investigated, including verifying the system routing and the condition of underground and above-ground piping and ancillary equipment (EMC 1989). As a result of this investigation, the health physics and chemical drainage systems were flushed, grouted, and abandoned (DOE 1997). Some of the chemical drain lines were replaced by an above-ground system currently used by tenants of the building.

A CMS and CMIP were completed and approved for the Building 100 Area because volatile organic compounds (VOCs) concentrations measured in ground water at the Old Drum Storage Site (PIN06) and one monitoring well located at the northwest corner of Building 100 (PIN12) exceeded the Safe Drinking Water Act (SDWA) and FDEP maximum contaminant levels (MCLs). Subsequent investigations revealed elevated VOCs concentrations under Building 100 and downgradient to the southeast as well. On August 15, 2000, the EPA approved the Building 100 CMIP Addendum. The FDEP approved this same document on November 15, 1999.

Commencing in May 2001, DOE began an analysis of the potential remediation strategies for the three Building 100 Area tasks: plume control, source treatment, and dissolved phase treatment. The *Building 100 Area Remediation Technology Screening Report* (DOE 2001) was prepared and assembled a list of remediation technologies, categorized them into the remediation tasks, and conducted an initial screening of the technologies. This initial screening eliminated the technologies that obviously would not work and recommended technologies that should be retained for detailed evaluation at a later time. The final technology for each task will be identified at a later date.

The *Building 100 Area Plume Control Technology Selection Report*, prepared in February 2002, conducted a detailed evaluation of five plume control technologies and recommended a technology that should be implemented for plume control at the Building 100 Area. Based on this evaluation, enhanced bioremediation was recommended to control the contaminant plume.

Currently, a request for proposal has been prepared that will be the basis for choosing the exact approach for implementation of enhanced bioremediation for plume control.

1.2 Northeast Site

In the late 1960s, before construction of the East Pond, drums of waste and construction debris were disposed of in the swampy area of the Northeast Site. The East Pond was excavated in 1968 as a borrow pit. In 1986, an expansion of the East Pond was initiated to create additional storm-water retention capacity. Excavation activities ceased when contamination was detected directly west of the East Pond. EPA identified the Northeast Site as a SWMU. An Interim Corrective Measures Study was developed and submitted to EPA and approval of this document was received in October 1991. An interim ground water recovery system for the Northeast Site was installed, and operation commenced in January 1992. The implementation of this interim corrective measures (ICM) system at this site is consistent with the regulatory goals of the EPA's RCRA Corrective Actions (Subpart S).

The ICM system, as initially installed, consisted of four recovery wells equipped with pneumatic recovery pumps, a holding tank, centrifugal transfer pumps, and approximately 2,500 feet (ft) of transfer and secondary containment piping. During 1993, DOE proposed a reconfigured system for the site consisting of four shallow and three deep recovery wells. After EPA approved the system upgrade, the system was reconfigured and became operational on March 1, 1994.

Between August and October 1995, after EPA and FDEP approval, a portion of the Northeast Site was excavated to remove debris and other materials that could inhibit future corrective measures. Location of the areas of excavation was based primarily on the results of a geophysical survey and knowledge of existing utility locations. Detailed descriptions of the debris removal activities were submitted to EPA and FDEP as part of the *Northeast Site Interim Measures Quarterly Progress Report* (DOE 1996).

In 1996, DOE submitted a CMIP to EPA Region IV and FDEP. This plan was approved by both regulatory agencies in 1997. As part of the Northeast Site CMS and CMIP, a pump-and-treat system in conjunction with a subsurface hydrogeologic barrier wall to prevent migration of the contaminant plume was identified as the best available technology. A pretreatment system for iron removal, an air stripper unit, and a tank for holding treated ground water before discharge to the Pinellas County Publicly Owned Treatment Works were recommended. The treatment

system was constructed in early 1997 and became operational by July 1997 with seven Northeast Site recovery wells and two Building 100 recovery wells pumping to the system influent tank. Subsequently, several additional recovery wells were installed, and some of the old recovery wells were abandoned.

During 1997, anaerobic bioremediation and rotary steam stripping pilot tests were conducted in the northern and southern portions of the Northeast site, respectively. These tests were designed by an Innovative Treatment Remediation Demonstration group of regulatory and industry members to provide remedial options at the STAR Center. At the conclusion of the field tests in July 1997, pump-and-treat technology resumed at the Northeast Site.

A technical and cost evaluation of four vendor responses to the In-Situ Thermal Remediation of Non-Aqueous Phase Liquid (NAPL) at the Northeast Site Request for Proposal was conducted during the later part of February and most of March 2001. The responses covered a conceptual design, life cycle schedule, and costs to implement. A vendor was contracted on July 6, 2001. A Conceptual Design was provided on September 14, 2001.

An Interim Measures Work (IMW) Plan for Remediation of Non-Aqueous Phase Liquids at the Northeast Site was submitted to the FDEP in late November 2001. The purpose of this document was to present the plan for the interim measure to remediate NAPLs at the Northeast Site. An interim corrective measure is warranted because it supports the long term corrective action to remediate the dissolved phase contamination in the surficial aquifer to FDEP drinking water MCLs. Without this measure, NAPLs will continue to act as a source of dissolved contamination, resulting in contaminant concentrations in ground water well above the MCLs. The FDEP approved this document on January 10, 2002.

Concurrent with the preparation of the IMW Plan, an Environmental Checklist recommending Categorical Exclusion was prepared and approved by DOE on December 19, 2001. The Categorical Exclusion pathway was approved based upon the fact that the NAPL remediation of Area A is a small-scale, short-term cleanup action and the siting, construction, and operation of treatment facilities are temporary and pilot-scale in size.

1.3 WWNA/Building 200 Area

The WWNA/Building 200 Area includes the active Industrial Wastewater Neutralization Facility (IWNF), the area around Building 200, and the area south of the neutralization facility. The IWNF refers to the physical treatment facility that currently receives sanitary and industrial wastewater and has been in operation since 1957.

A CMS Report and CMIP were completed in 1997 for this SWMU because vinyl chloride, trichloroethene (TCE), and arsenic were detected in surficial aquifer ground water at concentrations above Federal and State MCLs. The recommended remediation alternative for the WWNA/Building 200 Area was ground water recovery with the Building 100 Area wells and an additional recovery well located in the WWNA. The CMIP recommended that recovered water from the additional well be discharged directly to the IWNF and that the recovery well in the WWNA/Building 200 Area will withdraw surficial aquifer ground water directly from the arsenic plume and thereby reduce the contaminant mass and prevent contaminant migration.

The FDEP response to the CMS/CMIP concerning arsenic soil contamination in the upper 2 ft suggested that a treatment technology, air sparging, was eliminated too early. DOE then proposed a multi-phased Interim Action that included operating the recovery well for 6 months, then pulsing the system, as well as performing geochemical analyses and leaching studies of the site. On January 21, 1999, FDEP approved the proposed interim remedial action.

Additionally, EPA Region IV also approved the interim remedial action and concurred with the FDEP's position regarding the arsenic contamination. The EPA also requested an addendum or modification to the CMIP that addresses DOE's final selection of the remediation technology and a timeline for the completion of these activities.

In early June 1999, the WWNA recovery well commenced operation. All arsenic concentrations from the WWNA recovery well, PIN18–RW01, were below the STAR Center's daily maximum discharge standard for arsenic in wastewater of 0.20 milligrams per liter (mg/L) until shutdown.

Additional details concerning the impacts of ground water extraction are reported in the WWNA/Building 200 Area CMIP Addendum (DOE 2000e). Modifications to the recovery of ground water were proposed based on data collected through November 1999 and consisted of the installation of two new recovery wells screened at shallow intervals. The CMIP Addendum was submitted to the regulators and approved by FDEP and EPA. A Statement of Basis (DOE 2000d) was issued by DOE in late September 2000. This document provides a summary of environmental investigations and proposed cleanup alternatives for the WWNA/Building 200 Area. Current activities at the WWNA include ground water extraction from two recovery wells, PIN18–RW02 and –RW03, and discharge to the STAR Center's wastewater system. [Table 1](#) depicts the results of the analysis of arsenic in ground water that is being recovered from these two wells.

1.4 Site Update

The final design for the NAPL remediation at the Northeast Site was completed. NAPL remediation project plans, including the Health and Safety Plan, Environmental Compliance and Waste Management Plan, Quality Assurance and Quality Control Plan, and the Monitoring Plan, were also prepared to support NAPL remediation activities.

The *Management Plan for the NAPL Remediation Project at the Northeast Site* was prepared in March 2002 and describes the NAPL remediation project and the responsibilities, authorities, and actions of the participants in the project. The primary participants in the project are DOE, Stoller, the Stoller subcontractor SteamTech Environmental Services, and regulatory agencies. The plan also includes descriptions of the roles and responsibilities for the various phases of the project, such as design, construction, operation, maintenance, verification, compliance, and waste management.

Construction activities commenced in May for the Area A NAPL remediation and included abandonment of 12 ground water monitoring wells, five recovery wells, four piezometers, three cased boreholes and two horizontal wells. [Table 2](#) lists the wells abandoned. Additional construction activities included abandonment of underground electrical, compressed air, and water lines, the installation of an asphalt vapor cap over Area A, establishment of support infrastructure; e.g., office trailers, phone, sewer, and water hookups, etc., installation of a new feeder position at the Center's electrical substation and installation of a new 12-kilovolt

distribution feeder network to the Northeast Site, and installation of 15 steam injection wells, 28 electrode/extraction wells, and 21 electrode/steam injection wells.

In preparation for implementation of the plume control technology downgradient from Building 100, field work to better define the extent of the plume was conducted in late March 2002. Ground water samples were collected from 14 locations and, at each location, from two depths up to 40 ft below land surface using direct push technology. Figure 3 depicts the Building 100 plume delineation direct push technology locations. Additionally, sampling for a number of geochemical parameters was conducted, also to provide information for the Building 100 plume control task. The results of these investigations are shown in Section 3.2.2.

The Request for Proposal for In Situ Enhanced Bioremediation to Control the Plume of Dissolved Contaminants at the Building 100 Area at the Young – Rainey STAR Center will be issued in early July 2002. This document seeks a conceptual design and cost estimate to implement an enhanced bioremediation plume control system. The procurement will require a design and cost to perform a field pilot test. Award of the full-scale plume control option will be dependent on success of the pilot test and a best and final offer.

At six locations downgradient of Building 100 Area, triplet sets of well points were abandoned and replaced with small diameter ground water monitoring wells that have pre-packed well screens. Figure 4 depicts the new small diameter well nest locations. Table 3 provides well completion information from the well points that were abandoned. The small diameter wells have screened intervals at the same depth as the well points they replace.

1.5 Quarterly Site Activities

Stoller personnel conducted the following tasks at the STAR Center to fulfill the requirements of the scope of work for annual sampling:

- Obtained water-level measurements from all accessible monitoring wells, recovery wells, and ponds on April 8, 2002.
- Conducted the annual sampling event in April 2002. This included collecting water samples from 171 monitoring and recovery wells. VOC samples were collected at all wells. Sampling for RCRA metals and mercury was conducted at 78 Building 100 Area wells. Arsenic sampling was conducted at all 29 WWNA wells: seven of these wells were also sampled for RCRA metals and mercury.
- Reported the results of quarterly sampling events (this document).

2.0 Water-Level Elevations

2.1 Work Conducted and Methods

Within a 7-hour period on April 8, 2002, depth-to-water measurements were taken at all accessible monitoring wells and extraction wells at the STAR Center. The water levels were measured with an electronic water-level indicator with the exception of some of the ponds,

which are measured with gauging stations. Ground water and surface-water elevations are listed in [Table 4](#).

2.2 Ground Water Flow

Ground water and surface-water elevations were used to construct sitewide ground water contour maps of the shallow and deep surficial aquifers (Plates 1 and 2, respectively). Individual contour maps were also constructed for the shallow and deep surficial aquifers at the Northeast Site and the Building 100 Area ([Figure 5](#) through [Figure 8](#), respectively). All data points except the water level from sampling point PIN12-S55D were honored when constructing the interpretive contours. The water level from PIN12-S55D was about 8 ft lower than in the other deep wells at the Building 100 Area and was about 4 ft lower than surrounding wells in January 2002. Thus, it is suspected that the water level in PIN12-S55D is no longer representative of true aquifer conditions. This sampling point will be inspected in July 2002 to determine its fate.

The water levels throughout the STAR Center indicate that the water table is highest in the area around the West Pond (Plates 1 and 2). As ground water flows from this recharge area, it essentially disperses in a radial pattern in all directions. These flow patterns are similar for both the shallow and deep surficial aquifers.

At the Northeast Site, ground water flow patterns, especially in the deep surficial aquifer, are greatly affected by withdrawals from eight active recovery wells. Three active recovery wells were abandoned in April 2002 as part of NAPL treatment activities. The cones of depression resulting from the pumping of these recovery wells are particularly evident on [Figure 6](#). The overall influence of the recovery wells in the deep surficial aquifer extends from the East Pond to the west fence, and from the slurry wall to beyond the south fence.

Along the northern boundary of the Northeast Site, the contours near the slurry wall indicate that the wall continues to be a significant barrier to ground water flow. As seen on [Figure 6](#), there is a differential of almost 3 ft between the downgradient and upgradient side of the wall as measured in monitoring wells PIN15-M24D and -M33D. This differential is similar to that observed in previous quarters and continues to suggest that only a minimal amount of ground water recharge to the deep surficial aquifer is derived from the pond. Otherwise, the differential between these two wells would be smaller and the ground water gradient would be steeper near the pond, indicating recharge to the ground water system. The flow patterns of the water table immediately west of the East Pond, however, indicate that the pond is recharging the shallow surficial aquifer ([Figure 5](#)).

In the shallow surficial aquifer just south of the Northeast Site, the hydraulic gradient was approximately 0.016 feet per foot (ft/ft). Using Darcy's Law, along with approximations of 1 ft/day for hydraulic conductivity and 0.3 for effective porosity, ground water in the southern part of the site is estimated to move about 19 ft/year toward the north (i.e., toward the on-site extraction wells) under conditions influenced by pumping. This velocity is slightly greater than the estimated velocity in January 2002 (11 ft/year). In the deep surficial aquifer, the radius of influence from the recovery wells is interpreted to extend roughly 100 ft south of the south fence ([Figure 6](#)).

In the south-central part of the STAR Center, deep surficial aquifer flow is influenced by ground water withdrawals from recovery well PIN12-RW02 in the northwest corner of Building 100

(Figure 8). In addition, shallow surficial aquifer flow is influenced by withdrawals from recovery well PIN18–RW03 at the WWNA. Shallow ground water beneath Building 100 typically flows out laterally to the north, east, and south, but was relatively flat in April 2002. Shallow ground water at the WWNA flows to the southeast, except where affected by recovery well withdrawals. The hydraulic gradient beyond the influence of pumping at the Building 100 and WWNA Areas was less than 0.001 ft/ft. Using the approximations mentioned above, ground water flow velocity in these areas is estimated to be less than 1 ft/year.

Water-level elevations in the three wells screened in the upper part of the Floridan aquifer are presented in [Table 5](#). The relative elevations in these wells are consistent with the regional ground water flow direction, towards the northeast and Tampa Bay, for the Floridan aquifer.

A downward vertical hydraulic differential of approximately 7.7 ft existed between the surficial aquifer wells and Floridan aquifer wells at the Northeast Site. [Table 6](#) illustrates the vertical hydraulic differential. This differential is consistent with the historical range of 5 to 9 ft.

Surface-water elevations were recorded from the East, South, Southwest, and West Ponds at the site and are presented in [Table 7](#). The ponds are hydraulically connected to the shallow surficial aquifer system. A water level was obtained from the West Pond by directly reading a new staff gauge that was installed in the pond in December 2001. The South Pond elevation of 13.36 ft was below both the drain holes in the vertical concrete containment around the pond. The South and Southwest Pond elevations were essentially the same.

3.0 Ground Water Sampling and Analytical Results

3.1 Work Performed

During annual sampling in April 2002, ground water samples were collected from 171 monitoring and recovery wells. One hundred seventy-one (171) samples were analyzed for VOCs using EPA Method 8021. Eighty-five samples were analyzed for RCRA metals including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Mercury was analyzed using EPA Method 7470, the other metals were analyzed using EPA Method 6010. Twenty-two additional samples were analyzed for arsenic using EPA Method 6010. Laboratory reports are provided in Appendix A.

During the period of April 1 to June 30, 2002, the remediation system influent and effluent at the Northeast Site, as well as selected recovery wells at the Northeast Site, were also sampled. Analytical results for remediation system VOCs, iron, and hardness (as CaCO_3) sampling are provided in Appendix B. Laboratory reports for the WWNA analyses are provided in Appendix C. Laboratory reports for special sampling events are provided in Appendix D.

All samples were collected in accordance with the *Stoller Sampling and Analysis Plan for the Young - Rainey STAR Center*, using FDEP procedures. All samples collected were submitted to Severn Trent Laboratories (STL) for analysis. STL is accredited by the Florida Department of Health in accordance with the National Environmental Laboratory Accreditation Conference, certification number E84282. The majority of monitoring wells were micropurged using a dedicated bladder pump, and sampling was performed when the field measurements stabilized. The remaining wells were conventionally purged with a peristaltic pump or a 2-inch diameter

stainless-steel submersible pump; purging was considered complete when five well volumes were purged and one set of field measurements had stabilized. Extraction wells were sampled using their associated flowlines with dedicated sampling ports. [Table 8](#) lists field measurements of pH, specific conductance, dissolved oxygen, oxidation-reduction potential, turbidity, and temperature recorded at the time the sample was collected. Measurements were made with a flow cell and a multiparameter instrument.

3.2 Analytical Results

3.2.1 Northeast Site (PIN15)

Volatile organic compounds (VOCs), and benzene, toluene, ethylbenzene, and xylene (BTEX) concentrations in samples collected from wells at the Northeast Site (PIN15) are included in [Table 9](#) and [Table 10](#), respectively. [Table 11](#) provides data on additional VOCs detected that are not included in [Table 9](#) or [Table 10](#). [Figure 9](#) shows the total VOC (TVOC) concentrations and includes BTEX compounds.

No VOCs were detected in the 30 monitoring wells listed below:

PIN15-0506	PIN15-0516	PIN15-0534	PIN15-0565	PIN15-M24D
PIN15-0507	PIN15-0518	PIN15-0559	PIN15-M03D	PIN15-M27S
PIN15-0510	PIN15-0520	PIN15-0560	PIN15-M03S	PIN15-M29D
PIN15-0513	PIN15-0523	PIN15-0561	PIN15-M12D	PIN15-M29S
PIN15-0514	PIN15-0530	PIN15-0563	PIN15-M12S	PIN15-M32S
PIN15-0515	PIN15-0531	PIN15-0564	PIN15-M14D	PIN15-M33D

The 33 monitoring and recovery wells listed below contained detectable VOCs:

PIN15-0533	PIN15-0562	PIN15-M17S	PIN15-M34D	PIN15-RW13
PIN15-0535	PIN15-0566	PIN15-M27D	PIN15-M35D	PIN15-RW14
PIN15-0536	PIN15-0567	PIN15-M30D	PIN15-M36D	PIN15-RW15
PIN15-0537	PIN15-M14S	PIN15-M30S	PIN15-M37D	PIN15-RW16
PIN15-0538	PIN15-M16D	PIN15-M31D	PIN15-RW06	PIN15-RW17
PIN15-0557	PIN15-M16S	PIN15-M31S	PIN15-RW11	
PIN15-0558	PIN15-M17D	PIN15-M32D	PIN15-RW12	

TVOCs concentrations ranged from below detection limit to 9,920,000 micrograms per liter ($\mu\text{g/L}$) in well PIN15-M35D. The compound detected at the highest concentration in PIN15-M35D was methylene chloride at a concentration of 9,000,000 $\mu\text{g/L}$.

3.2.2 Building 100 Area (PIN12)

VOCs concentrations in samples collected from wells sampled at the Building 100 Area (PIN12) are included in [Table 9](#). BTEX compounds were detected and are shown in [Table 10](#). [Table 11](#) provides data on additional VOCs detected that are not included in [Table 9](#). [Figure 10](#) shows the TVOCs concentrations. [Table 12](#) lists the metals concentrations.

No VOCs were detected in the 31 monitoring wells listed below:

PIN12-0508	PIN12-0518	PIN12-S56C	PIN12-S69B	PIN12-S73B
PIN12-0510	PIN12-0522	PIN12-S56D	PIN12-S69D	PIN12-S73D
PIN12-0511	PIN12-0527	PIN12-S57B	PIN12-S71B	PIN12-TE03
PIN12-0512	PIN12-0528	PIN12-S59D	PIN12-S71D	
PIN12-0515	PIN12-S31B	PIN12-S60C	PIN12-S72B	
PIN12-0516	PIN12-S36B	PIN12-S60D	PIN12-S72C	
PIN12-0517	PIN12-S56B	PIN12-S68B	PIN12-S72D	

Samples from the 36 monitoring wells listed below contained VOCs at detectable levels. They are:

PIN12-0509	PIN12-0526	PIN12-S37B	PIN12-S60B	PIN12-S70C
PIN12-0513	PIN12-RW01	PIN12-S54D	PIN12-S67B	PIN12-S70D
PIN12-0514	PIN12-RW02	PIN12-S55B	PIN12-S67C	PIN12-S71C
PIN12-0520	PIN12-S29C	PIN12-S55C	PIN12-S67D	PIN12-S73C
PIN12-0521	PIN12-S30B	PIN12-S57C	PIN12-S68C	
PIN12-0523	PIN12-S32B	PIN12-S57D	PIN12-S68D	
PIN12-0524	PIN12-S33C	PIN12-S59B	PIN12-S69C	
PIN12-0525	PIN12-S35B	PIN12-S59C	PIN12-S70B	

TVOCs concentrations ranged from below detection limits to 175,800 µg/L in well PIN12-S35B. The compound detected at the highest concentration in PIN12-S35B was cis-1,2-DCE at a concentration of 110,000 µg/L.

Floridan aquifer wells PIN12-0527, -0528, and PIN15-0513 were sampled for VOCs this quarter. The only analyte detected was methylene chloride at a maximum concentration of 0.4 µg/L. This is an estimated value that is above the instrument detection limit but below the reporting limit. This result is believed to be due to laboratory contamination, as methylene chloride was also found in the blank samples.

3.2.3 Wastewater Neutralization Area (PIN18)

No VOCs were detected in the 24 wells listed below.

PIN18-0501	PIN18-0507	PIN18-0512	PIN18-0517	PIN18-0524
PIN18-0502	PIN18-0508	PIN18-0513	PIN18-0518	PIN18-0525
PIN18-0503	PIN18-0509	PIN18-0514	PIN18-0520	PIN18-RW02
PIN18-0504	PIN18-0510	PIN18-0515	PIN18-0522	PIN18-RW03
PIN18-0506	PIN18-0511	PIN18-0516	PIN18-0523	

Samples from the five monitoring wells listed below contained VOCs at detectable levels. They are:

PIN18-0500	PIN18-0505	PIN18-0519	PIN18-0521	PIN18-0526
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TVOCs concentrations ranged from below detection limits to 6.7 µg/L in well PIN18–0519. The compound detected at the highest concentration in PIN18–0519 was vinyl chloride at a concentration of 6.7 µg/L.

Arsenic samples were collected from 29 wells. Arsenic concentrations are listed in [Table 13](#) and shown in [Figure 11](#). The highest concentration of arsenic detected was 0.7 mg/L in PIN18–0501. RCRA metals were mistakenly analyzed in seven wells. The results are shown in Table 12.

3.2.4 Perimeter (PIN21) and Other Monitoring Wells (PIN05, PIN06, PIN09, and PIN10)

Concentrations of VOCs and BTEX compounds measured in samples from perimeter and other monitoring wells are included in Table 9 and Table 10, respectively. Table 11 provides data on additional VOCs detected that are not included in Table 9. Figure 10 shows the TVOCs concentrations for the PIN21 wells.

No VOCs were detected in the eight monitoring wells listed below:

PIN05–0500	PIN10–0500	PIN21–0502	PIN21–0504
PIN06–0500	PIN21–0500	PIN21–0503	PIN21–0505

Samples from the four monitoring wells listed below contained VOCs at detectable levels. They are:

PIN06–0501	PIN09–0500	PIN21–0501	PIN21–0512
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The sample from PIN06–0501 contained TVOCs at 11.4 µg/L. The compound detected at the highest concentration in PIN06–0501 was 1,4-dichlorobenzene at a concentration of 9.6 µg/L.

3.3 Quality Assurance/Quality Control

Stoller checked the analytical results from STL for quality assurance/quality control (QA/QC) through duplicate samples, trip blanks and equipment blanks. Detected analytes for VOCs, metals and arsenic analyses for each duplicate sample are listed in [Table A–1](#) (Appendix A). The duplicate sample results were compared and the relative percent differences (RPDs) between the results were calculated. There were 11 duplicates analyzed for VOCs and four duplicates analyzed for RCRA metals and two duplicates analyzed for arsenic. A total of 430 duplicate analyses for individual analytes were performed. Three of the analyses failed. Two sample/duplicate pairs, PIN15–M31D and PIN15–RW15 had some analytes that did not meet the guidance criterion that the RPDs results should be within the range of ±30 percent when the concentration is greater than 5 times the detection limit. The failure rate was less than 1.0 percent. All other data passed QA/QC criteria at a Class A level, indicating that all data may be used for quantitative and qualitative purposes.

Duplicate samples should be collected at a frequency of one duplicate for every twenty or fewer samples. There were 171 ground water samples analyzed for VOCs and 11 duplicate VOC samples collected. There were 85 ground water samples analyzed for RCRA metals and four duplicate samples. There were 22 ground water samples analyzed for arsenic and two duplicates. The duplicate requirement for VOCs and for arsenic was met for this sampling event. The

duplicate requirement for RCRA metals was not met. This is because the seven RCRA metals samples from the WWNA were collected in error and were not originally scheduled.

During the quarterly sampling event, 12 trip blanks were submitted for analysis. Seven of the blanks continued to show an ongoing pattern of low-level methylene chloride results, probably due to laboratory contamination. The level of contamination is lower than seen in the sampling events before January 2002. The laboratory had reported that they moved their extraction laboratory (which uses methylene chloride) farther from the environmental laboratory and this appears to have helped reduce the level of laboratory contamination. The highest methylene chloride concentration was 2.6 µg/L. An estimated concentration of toluene was also seen in one blank sample. All values were above the instrument detection limit but below the reporting limit.

4.0 Data Interpretation

This data interpretation section is included in each April to June quarterly report to aid in evaluation of remediation progress and plume movement. Time vs. concentration plots and plume maps were generated to aid the interpretation.

4.1 Contaminant Concentration Trends

Monitoring wells PIN15–0537 and –0558 were chosen to evaluate plume movement and plume control at the Northeast Site. Well –0537 lies in the southern area of the plume and well –0558 lies along the southern edge of the plume. The concentration with time plots for cis-1,2-DCE and vinyl chloride are depicted in [Figure 12](#) and [Figure 13](#). Both cis-1,2-DCE and VC in both wells showed increasing concentrations in 1999 and 2000, but have since shown decreasing concentration trends. It is likely that this decreasing trend is due to the effect of the recovery wells RW16 and RW17, which began operation in January 2001.

At the WWNA, three wells were chosen to depict remediation progress. Wells PIN18–0500, –0522, and –0525 were chosen because they are shallow wells containing the highest arsenic concentrations in the plume area ([Figure 14](#)). Well 0500 shows a consistent decreasing arsenic concentration trend. Wells 0522 and 0525 show short term increasing and decreasing trends that may have a seasonal cause.

Monitoring wells PIN21–0512 and PIN12–S66C/S73C were chosen to depict plume migration at the Building 100 Area because they are the monitoring wells nearest the property boundaries. Well S66C was abandoned in March 2002 and replaced with well S73C installed a few feet away. Well S73C was sampled for the first time in April 2002. Well 0512 lies along the southern boundary and wells S66C/S73C lie along eastern boundary of the STAR Center.

Vinyl chloride was chosen as the compound most indicative of plume movement, and [Figure 15](#) depicts vinyl chloride concentrations over time in wells 0512 and S66C/S73C. Well 0512 shows a slight increasing VC concentration trend. Well S66C has shown a relatively consistent VC concentration over a few years, while the initial sampling event at S73C indicates a higher VC concentration. This difference in VC concentrations in the two wells may be a function of the different locations of the two wells, even though they are only a few feet apart. These relatively consistent concentration trends indicate that plume movement is relatively slow in this area, as

would be expected based on historical estimated ground water flow velocities of approximately 10 feet per year, although the estimate this quarter was less than 1 foot per year.

4.2 Plume Maps

For each SWMU, plume maps were generated for the TVOCs as well as selected contaminants. The compound-specific MCL has been utilized to draw the inferred plume boundary for each contaminant TVOC boundary (i.e., concentrations below the MCL were not included in the plume area). The TVOCs plume area includes any detected concentration. The outline of the plume from April 2001 is also shown on the maps for comparison.

Plume maps for the Northeast Site have been generated for TVOCs (Figure 16), vinyl chloride (Figure 17), cis-1,2-DCE (Figure 18), TCE (Figure 19), methylene chloride (Figure 20), toluene (Figure 21), and benzene (Figure 22).

A factor that must be considered when comparing last year's Northeast Site plume maps with this year's plumes is the abandonment of all the monitoring and recovery wells in and near the northern NAPL area prior to the April sampling event. These wells were abandoned to ensure that they would not interfere with the operation of the NAPL remediation activities. However, these wells also defined the plume in this area. The wells that still exist around the periphery of this area have few contaminant detections. Therefore, on the plume maps, it appears that many of the individual contaminant plumes no longer extend to the north, when in fact they do extend to the north.

Given the caveat above, comparison of the current Northeast Site plumes with last year's plumes indicates that some of the plumes in the southern area of the site may be shrinking slightly. However, this interpretation is complicated by elevated reporting limits for some contaminants at some locations. For example, in Figure 18, cis-1,2-DCE was not detected in well 0558 with a reporting limit of 250 µg/L, yet was detected in this well at 180 µg/L in April 2001. The cis-1,2-DCE concentration at this location may still be 180 µg/L, but that cannot be determined because of the elevated reporting limit. Nonetheless, some of the plumes appear to be shrinking around their peripheries, probably as a result of the continuous operation of the recovery well network.

Figure 11 depicts the arsenic plume at the WWNA. This plume is the same size as in 2001. This also is slightly misleading in that last year the arsenic MCL was 50 µg/L, and this year the arsenic MCL is considered to be 10 µg/L. If the arsenic MCL was still 50 µg/L, the 0523/0524/0525 well cluster would not be included in the plume because the arsenic concentrations in these wells are below the old 50 µg/L MCL.

Plume maps for the Building 100 Area have been generated for TVOCs (Figure 10), VC (Figure 23), cis-1,2-DCE (Figure 24), and TCE (Figure 25). The TVOCs and vinyl chloride plumes appear to have shrunk on their southwestern sides, due to the fact that VC was not detected in well 0518 in April 2002. VC was detected in this well in April 2001, and was subsequently detected in October 2001, but was below the 1 µg/L reporting limit in January and April 2002.

The cis-1,2-DCE plume appears to have expanded near the southeast corner of Building 100 relative to the April 2001 plume area. This is partially due to the installation of wells S67B, C, and D which show high cis-1,2-DCE concentrations. The cis-1,2-DCE concentrations in

well 0514 have remained fairly consistent over the last three years, sometimes slightly above the 70 µg/L MCL, sometimes less than the MCL. The concentration in April 2001 was less than the MCL, while in April 2002 the concentration was above the MCL, leading to the inclusion of this well in the plume this year. Cis-1,2-DCE concentrations in well 0524 indicate a distinct increasing trend. Vinyl chloride concentrations in this well also show an increasing trend, indicating that higher contaminant concentrations may be emerging from under the building in this area.

4.3 Geochemical Parameters

Geochemical parameters measured in all wells at the STAR Center during April 2002 are summarized in Table 8. Conditions across the STAR Center generally are reducing as evidenced by the low values of DO and ORP.

5.0 Treatment System and Recovery Well Performance

5.1 Northeast Site and Building 100

The Northeast Site ground water treatment system was operational from April 1 through June 30, 2002. However, during this quarter, some system downtime was experienced. During the weekend of April 6–7 the system was off and the exact cause of the shutdown is unknown. Additional downtime was experienced in April during utility excavation preparation, well abandonment, and utility excavation events that were performed in preparation for the NAPL Remediation Project. During the months of May and June, the only downtime experienced was a brief shutdown of Building 100 wells on the first weekend of June due to power fluctuation.

In April, three active recovery wells (DRW5, RW08, and RW09) and multiple monitoring wells were grouted and cut below land surface in preparation for construction related to the NAPL Remediation Project. All utilities related to these wells were excavated and disposed of. This work resulted in the complete removal of all recovery wells, monitoring wells, and utilities within the Area A boundary of the NAPL Remediation Project.

Table 14 provides a summary of analytical results for samples collected at the Northeast Site Treatment System during this quarter. FeRemede® continues to be utilized to effectively control the deposition of iron and hardness salts. The application of sodium hypochlorite as a microbiocide has continued to successfully control biological growth in the air stripper tower.

From April 1 through June 30, 2002, 2,119,164 gallons of ground water were recovered from the Northeast Site and Building 100 recovery wells. The volume of recovered ground water treated by the Northeast Site Treatment System since its startup in June 1997 through March 2002 is presented in Chart 1. Charts 2, 3, and 4 present the monthly volume of ground water recovered during April through June 2002 from the Northeast Site recovery wells.

A Recovery Well Drawdown Enhancement Plan was completed this quarter. The goal of the plan was to optimize ground water recovery at wells in the Northeast Site wellfield and at Building 100. Per the plan, the ground water recovery rate at four Northeast Site wells and one Building 100 well was increased. The result has been an increase of ground water recovery at the

select wells. An increase in contaminant mass recovery was initially observed before the three recovery wells were abandoned; however, even with the removal of three wells, mass recovery continues to rebound to near previous levels when all the recovery wells were operational.

The treatment system and recovery wells experienced short periods of downtime during the month of April to prepare and excavate utilities, concrete vaults, and recovery wells in preparation for the NAPL Remediation Project. Additionally, as mentioned previously, system and wellfield operations were interrupted in early April due to an unexplained treatment system shutdown. The monthly ground water recovery from April through June 2002 for the Building 100 recovery wells is presented in [Charts 5, 6, and 7](#), respectively.

Total percent on-time for the Northeast Site air stripper tower (AST) is illustrated in [Chart 8](#). On-time for the AST for this quarter was affected by the above-described minor outages. Historical Summary of Ground water at the Northeast Site and Building 100 is shown in Appendix E as [Table E-1](#).

[Table 15](#) presents the calculated mass of selected analytes recovered with the Northeast Site treatment system for each month of this reporting period. These monthly results are based on the measured system influent concentration and influent ground water flow.

5.2 Wastewater Neutralization Area

The two recovery wells (PIN18–RW02 and –RW03) continue to produce approximately 2.5 gallons per minute continuously with an electrical submersible pump set in each well at approximately 12 ft below land surface. The effluent ground water from each well is combined into a common header pipe and discharged into the industrial wastewater-receiving tank at the IWNF. During this quarter, 519,284 gallons of ground water were recovered from the IWNF. Since start-up on February 26, 2001, both wells have operated continuously.

6.0 Current and Project Work

6.1 Summary

Work for April through June 2002 included sampling of ground water monitoring wells and recovery wells for water quality, flow, and water levels. The treatment system and recovery wells were operated during the entire quarter, except for some short periods of downtime that were described in Section 5.1.

6.2 Project Work Conducted

- The Northeast Site treatment system influent and effluent were sampled during the quarter. Treatment system effluent samples were analyzed for VOCs and the effluent discharge volume was recorded to comply with the Pinellas County wastewater permit. In the effluent samples, all volatile organic aromatic concentrations were under the Pinellas County regulatory limit of 50 µg/L.
- Maintenance performed during the quarter consisted of routine preventative maintenance.

- Recovery wells, monitoring wells, and utilities were removed from Area A of the NAPL Remediation Project.

7.0 Conclusions

The following conclusions are based on the quarterly sampling conducted in April 2002.

- No significant changes in the surficial ground water flow direction or relative potentiometric levels were observed for the prevailing pumping and seasonal recharge conditions.
- The highest concentration of VOCs was detected at the Northeast Site well PIN15–M35D.
- Concentrations of VOCs decreased in downgradient monitoring well PIN15–0558 and the operation of recovery well PIN15–RW16 appears to be controlling plume movement along the southern perimeter of the Northeast Site.

8.0 Tasks to Be Performed Next Quarter

The following tasks are expected to be conducted during the next quarterly period (July through September 2002):

- Quarterly sampling activities will occur in early July 2002.
- Monthly and mid-monthly sampling and analysis of ground water will continue in order to provide compliance and system operations data.
- Treatment system optimization will continue as new issues develop.
- Utilization of the dedicated bladder pumps for quarterly sampling using the micropurging technique will continue.

9.0 References

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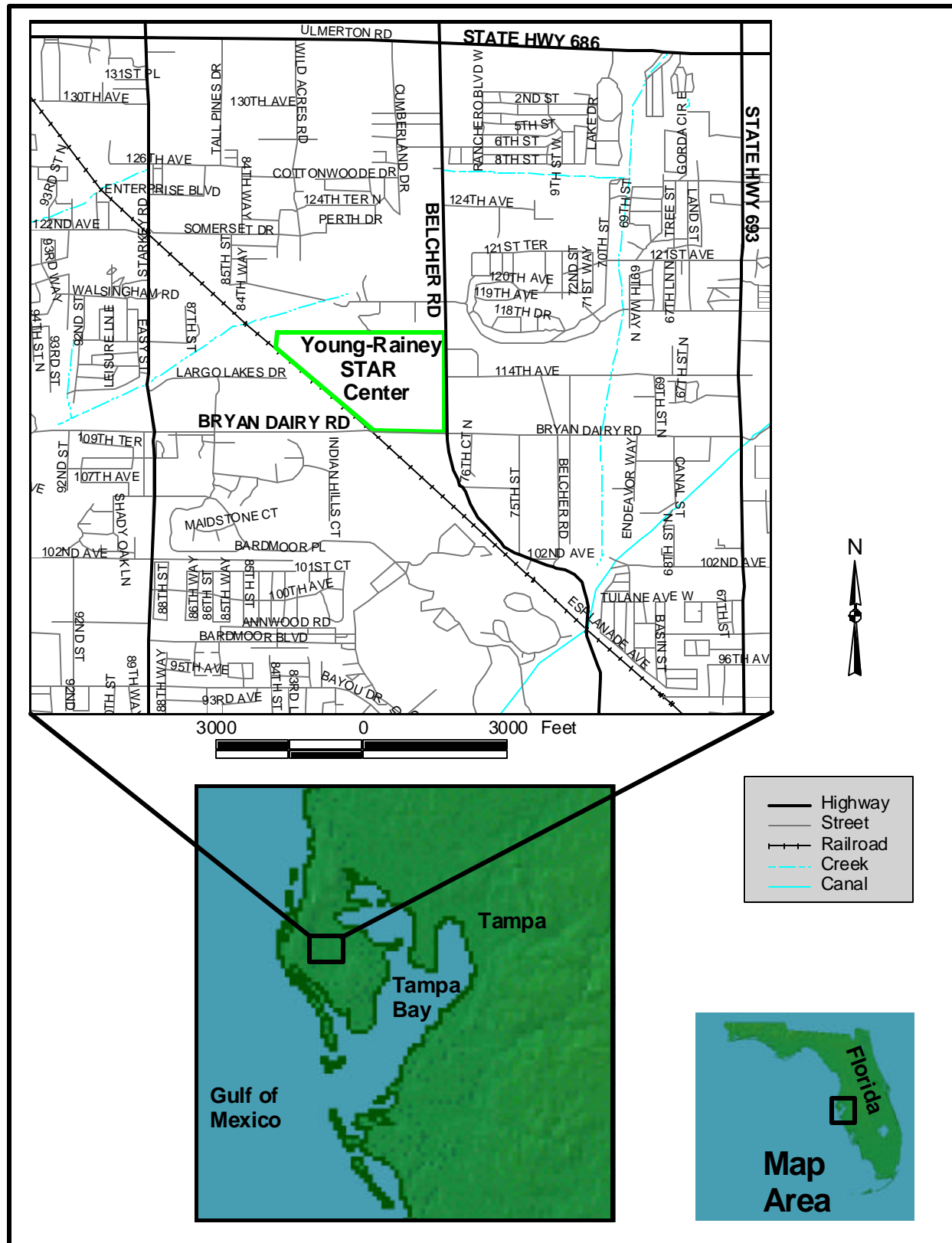
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Figure 1. Young - Rainey STAR Center Location

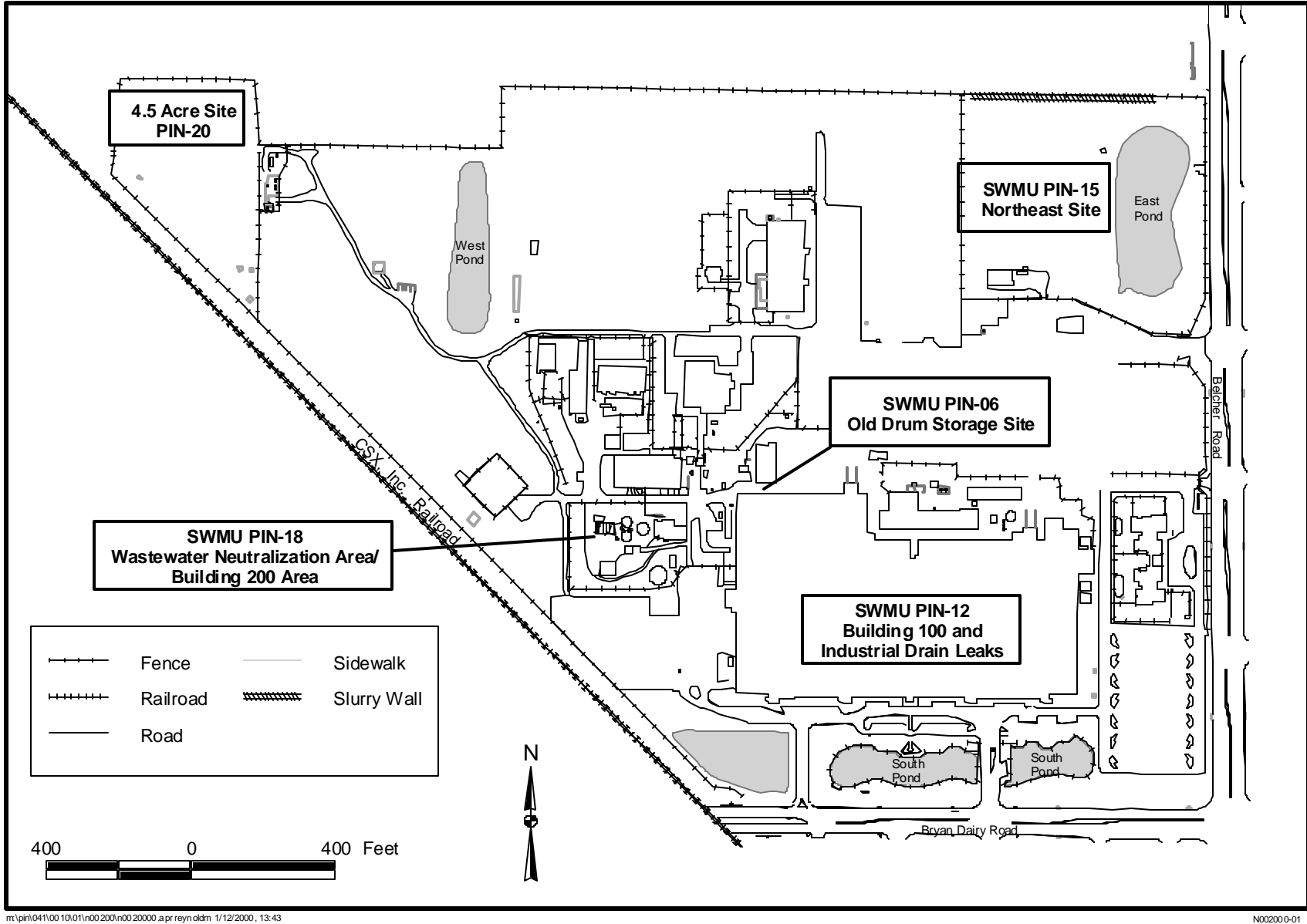


Figure 2. Location of STAR Center Solid Waste Management Units (SWMUs)

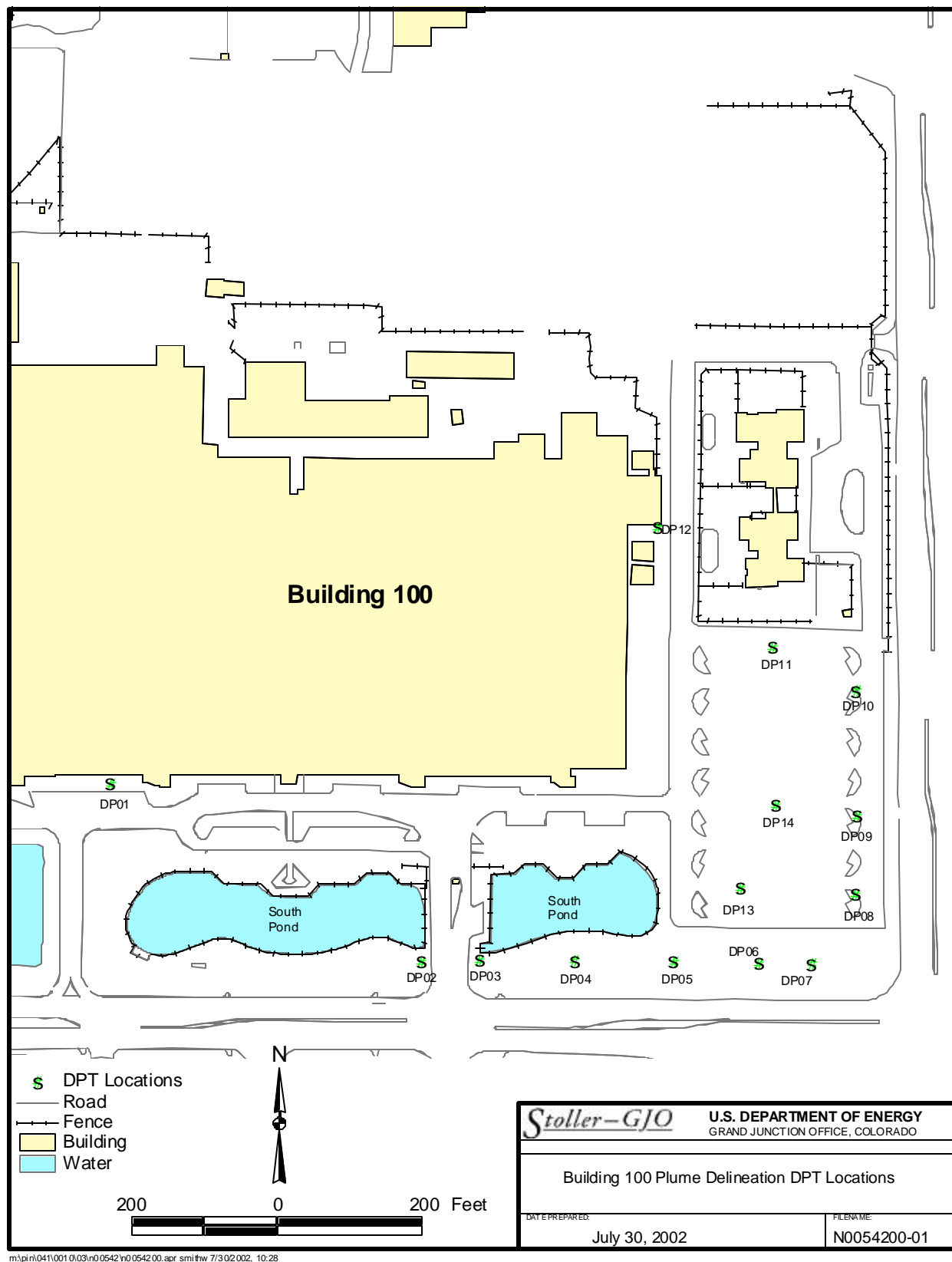


Figure 3. Building 100 Plume Delineation DPT Locations

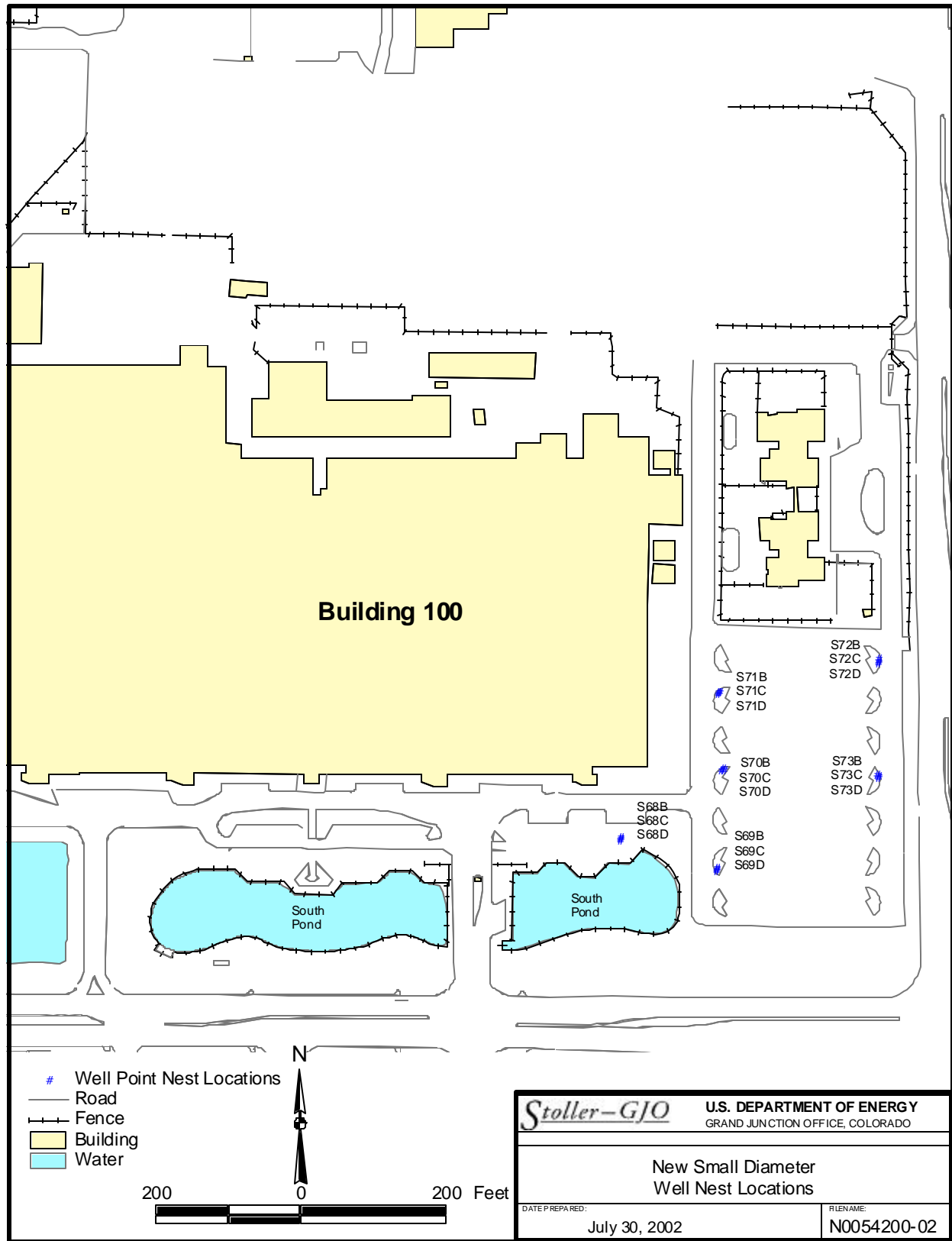
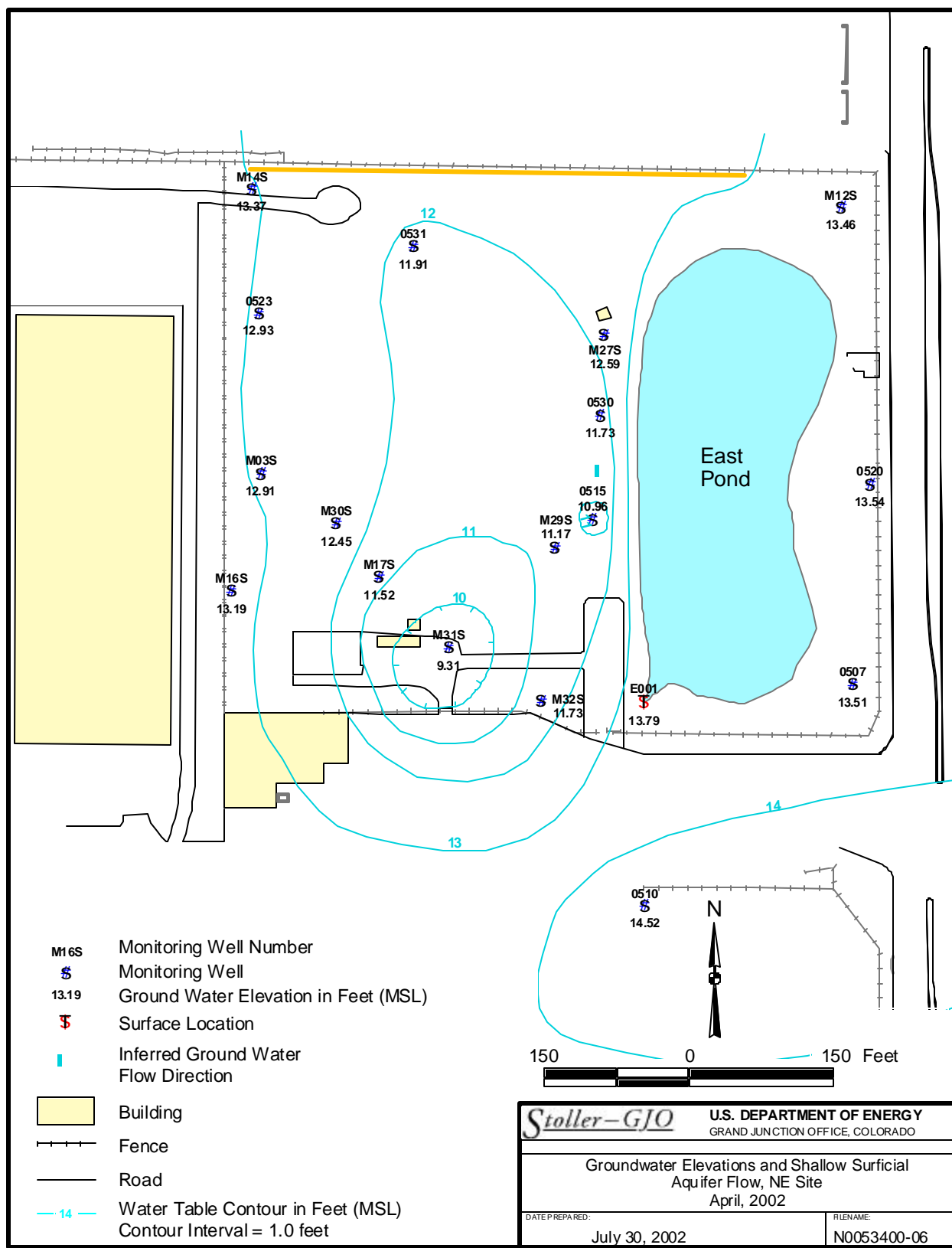


Figure 4. New Small Diameter Well Nest Locations



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Figure 5. Ground Water Elevations and Shallow Surficial Aquifer Flow, Northeast Site, April 2002

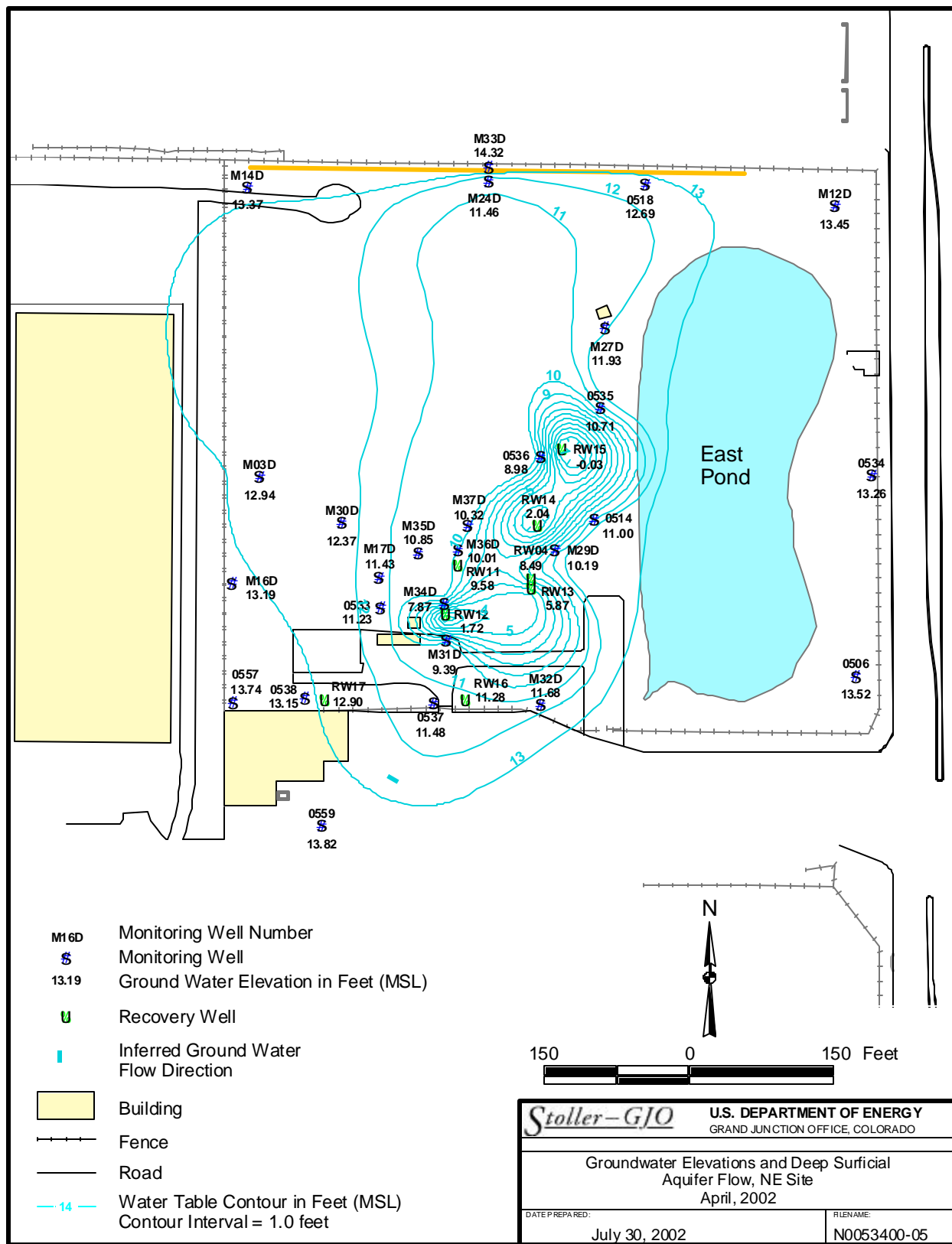


Figure 6. Ground Water Elevations and Deep Surficial Aquifer Flow, Northeast Site, April 2002

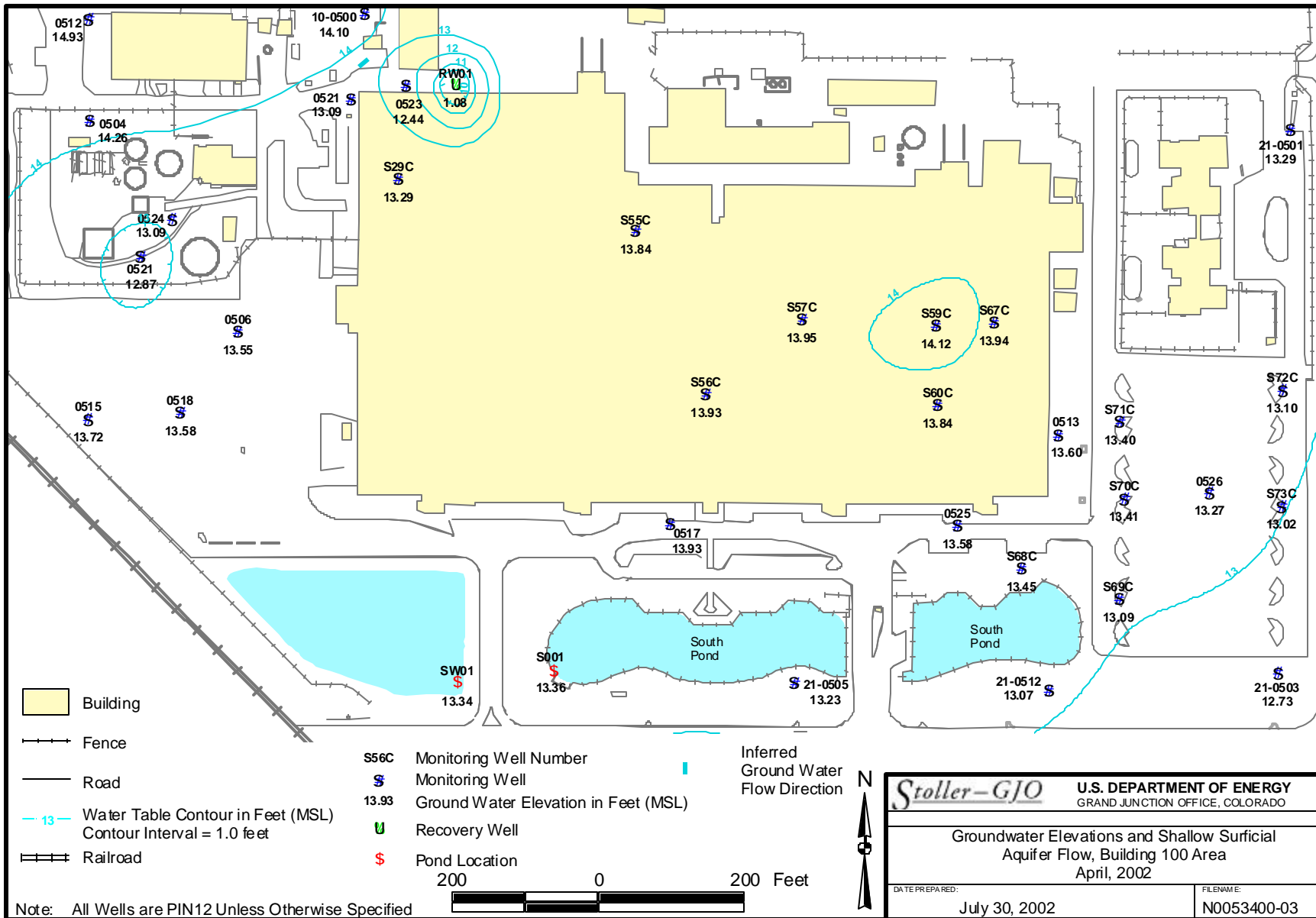


Figure 7. Ground Water Elevations and Shallow Surficial Aquifer Flow, Building 100 Area, April 2002

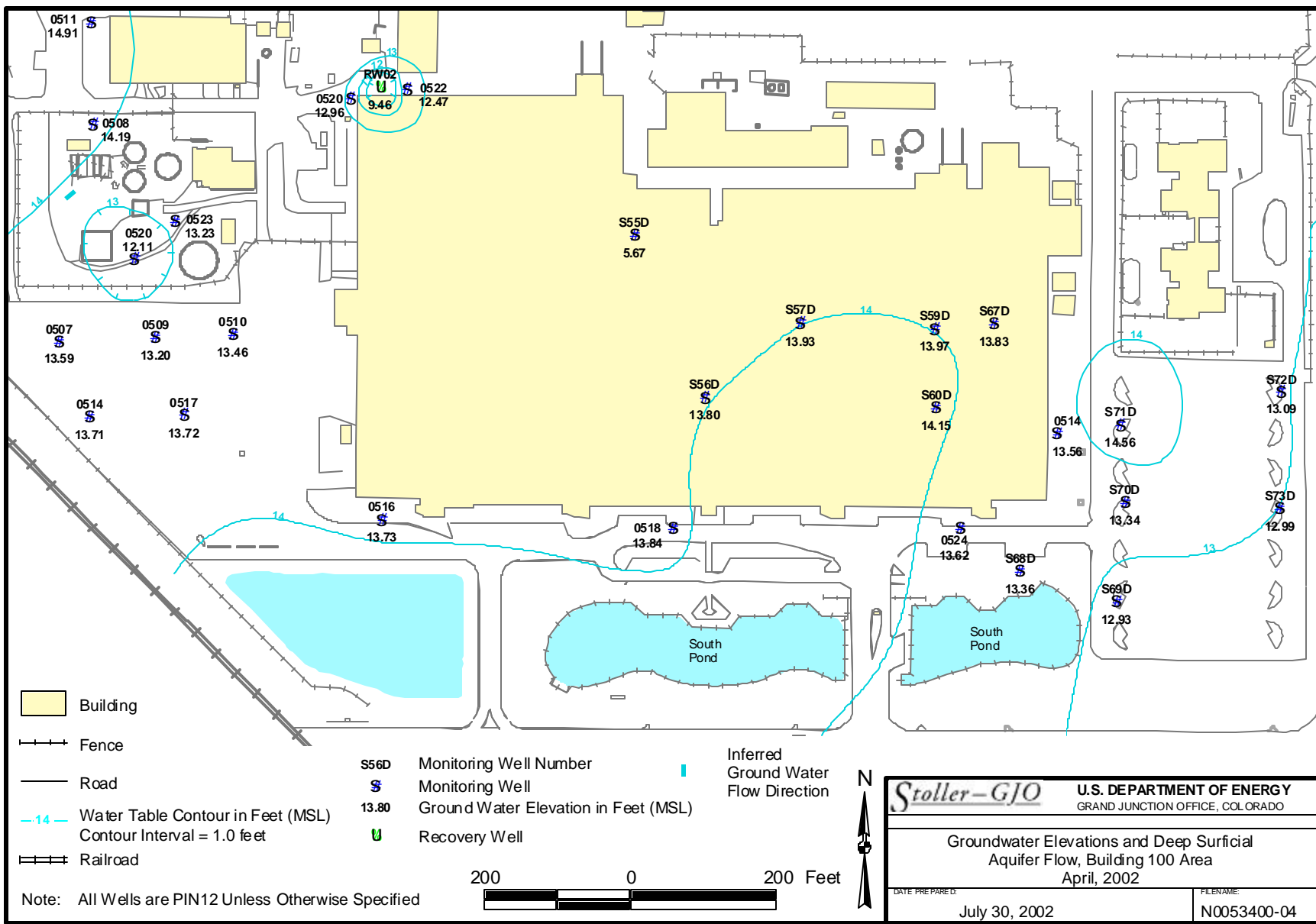
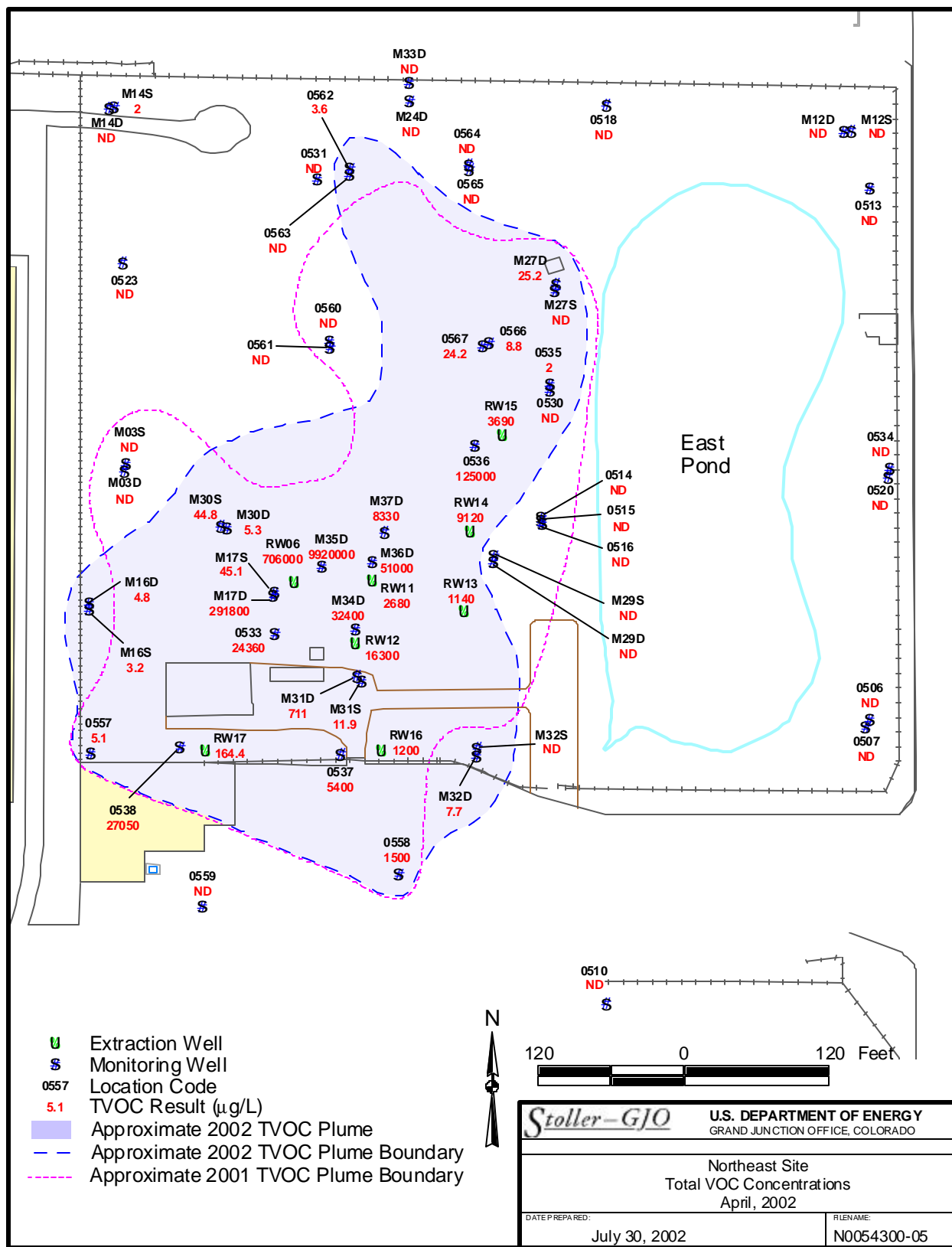


Figure 8. Ground Water Elevations and Deep Surficial Aquifer Flow, Building 100 Area, April 2002



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Figure 9. Total VOCs Concentrations at the Northeast Site, April 2002
(wells without VOC values or "NDs" were not sampled during this quarter)

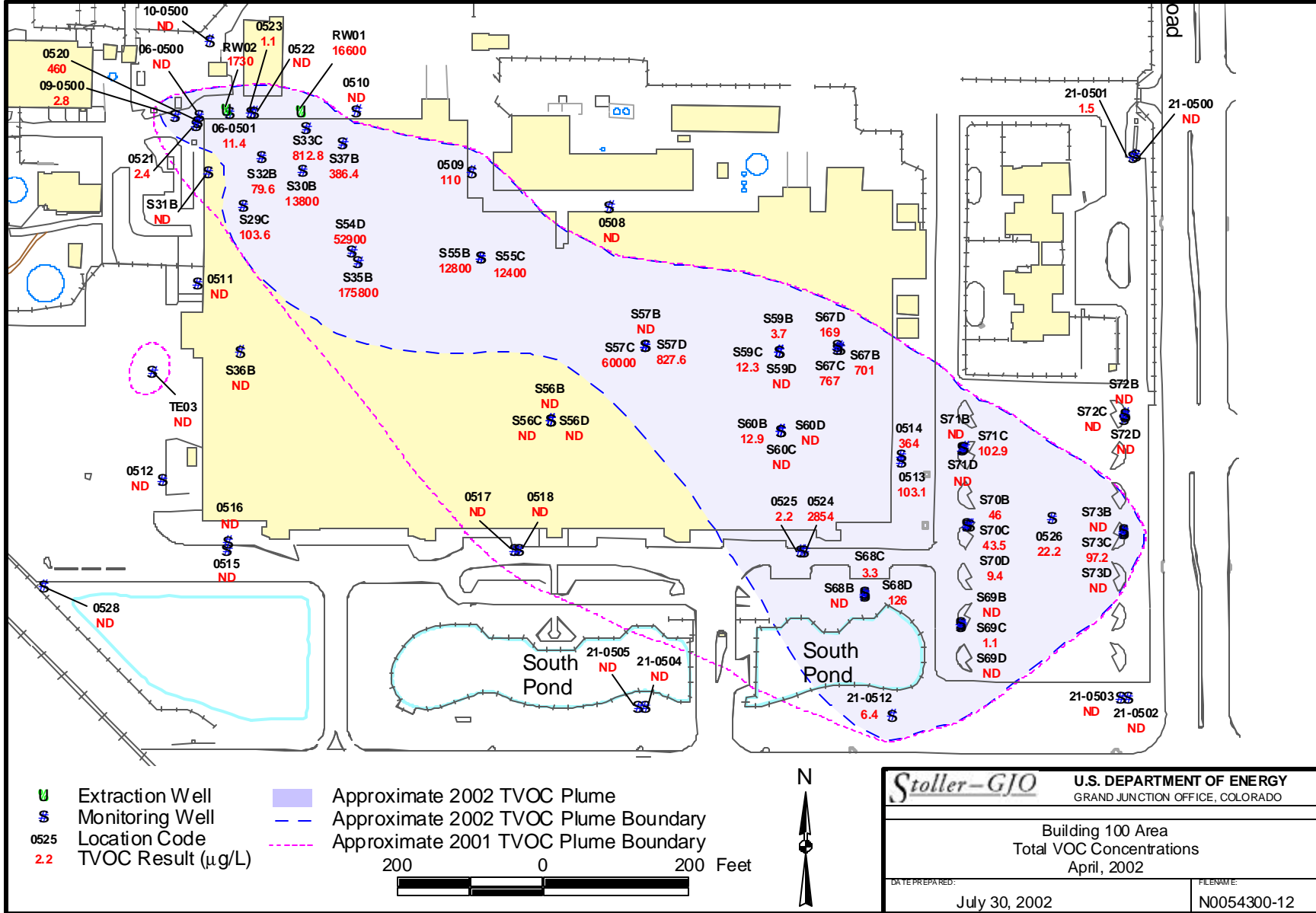
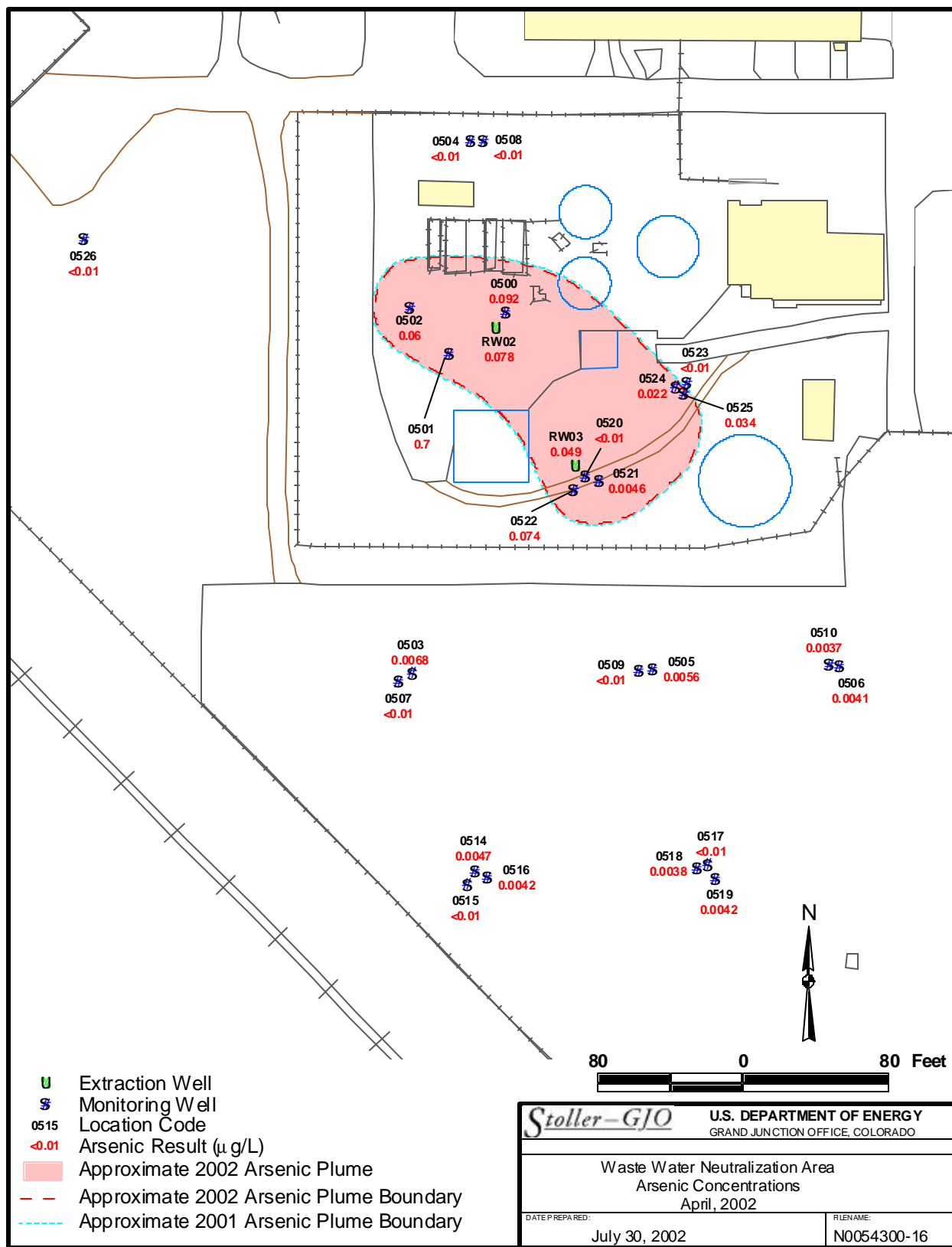


Figure 10. Total VOCs Concentrations at Building 100, April 2002



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Figure 11. Arsenic Concentrations at the WWNA, April 2002

15-0537

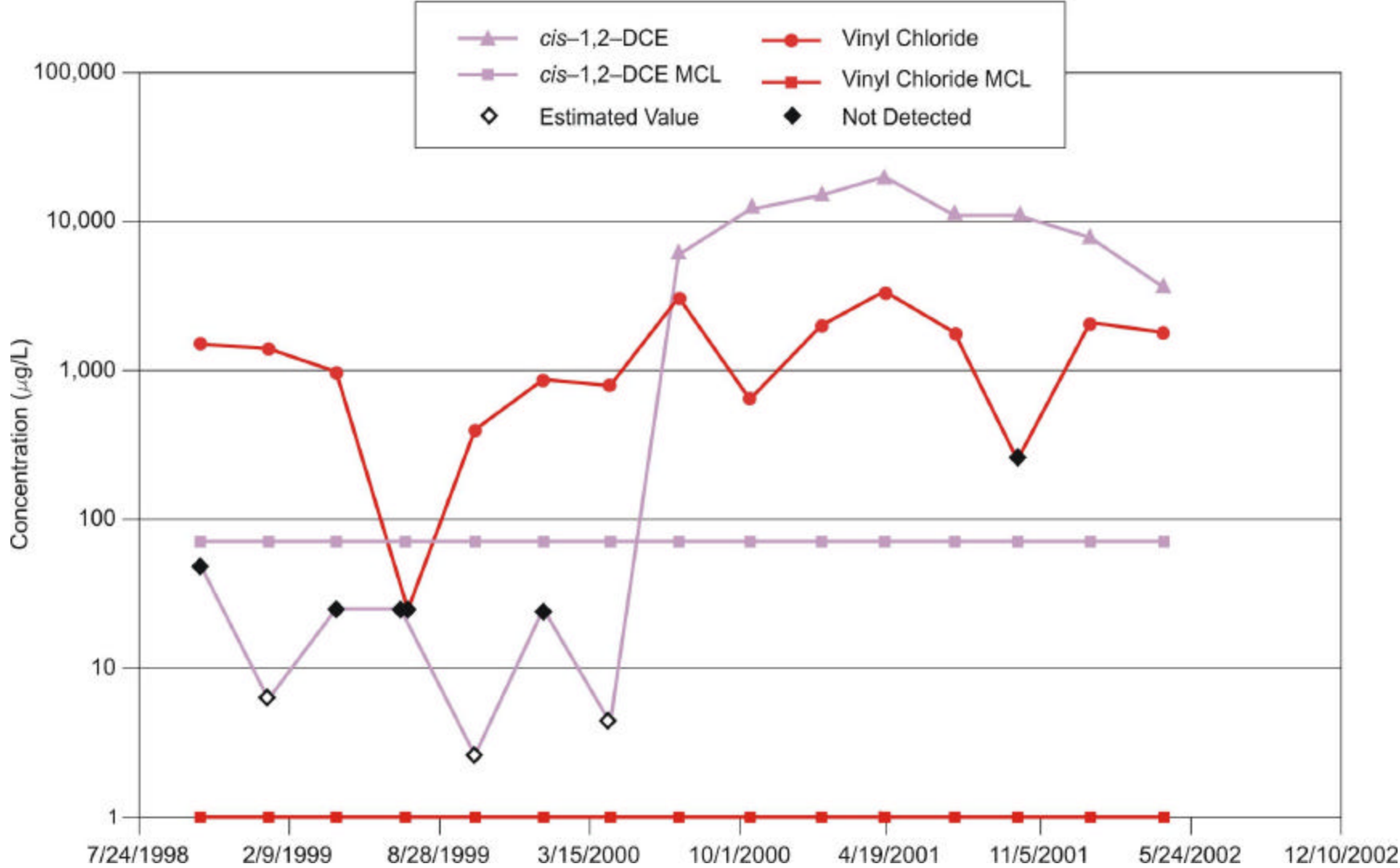


Figure 12. VC and *cis*-1,2-DCE Trends in 15-0537

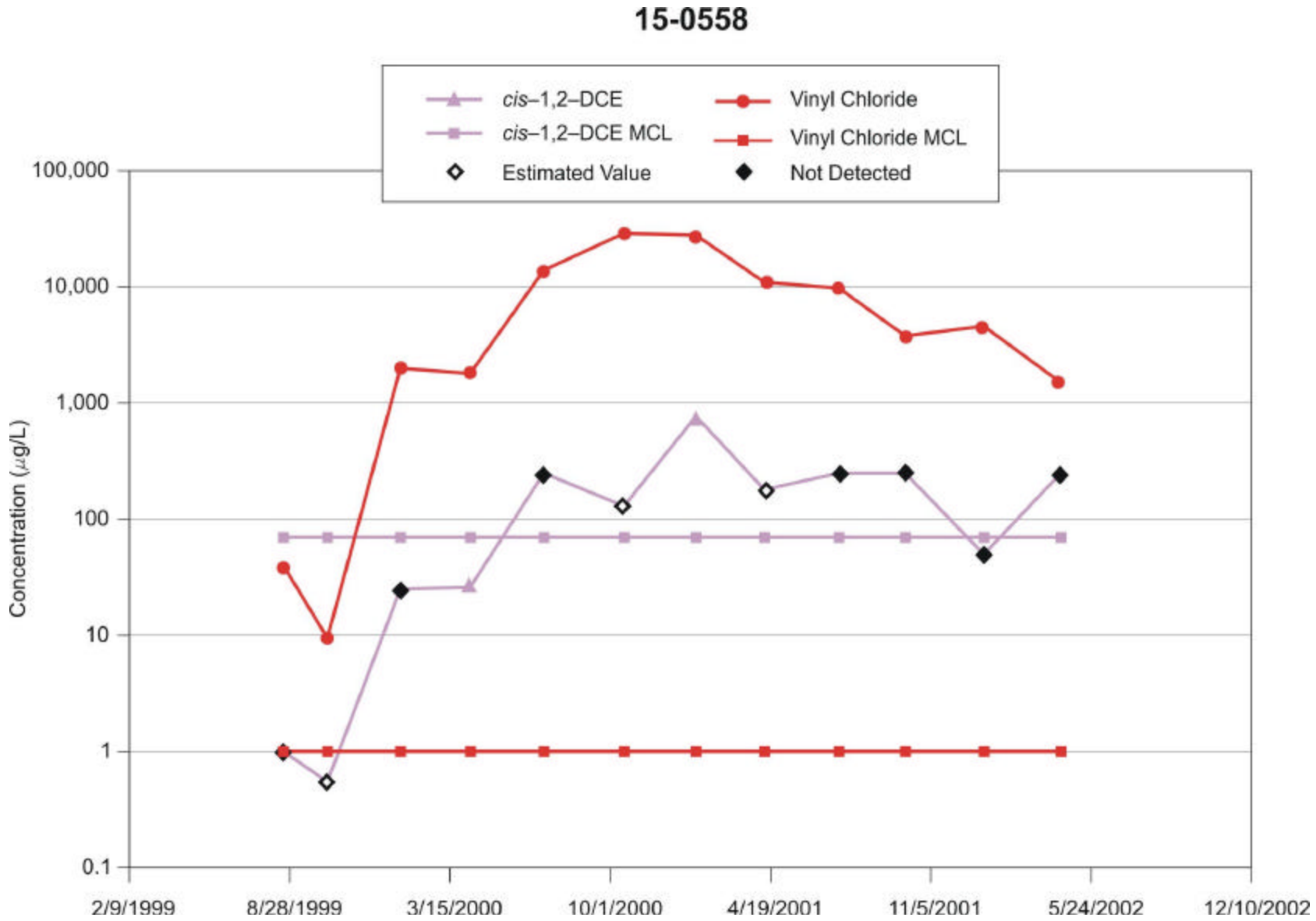


Figure 13. VC and *cis*-1,2-DCE Trends in 15-0537

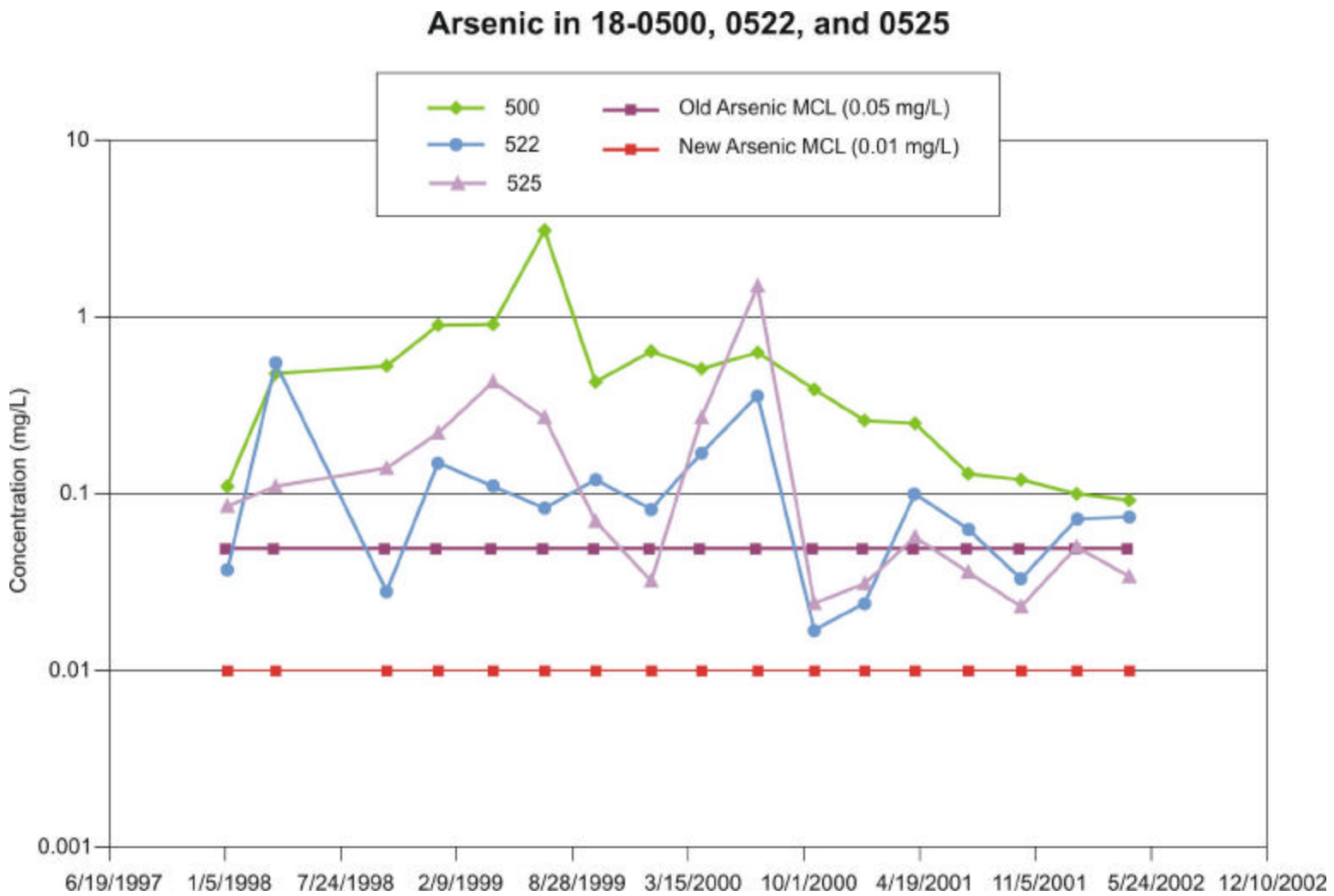


Figure 14. Arsenic Trends in 18-0500, -0522, and -0525

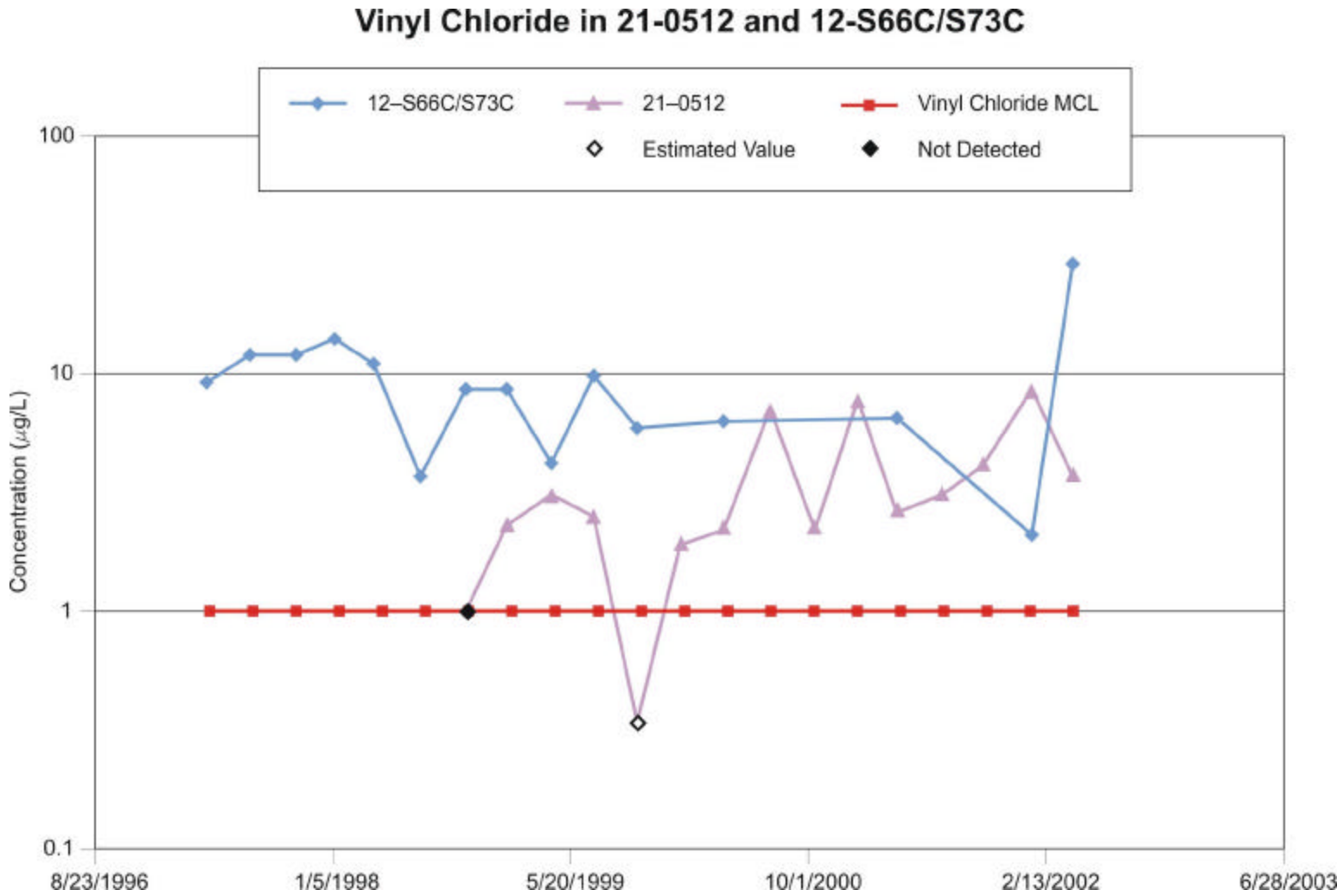


Figure 15. Vinyl Chloride Trends in 21-0512, and 12-S66C/S73C

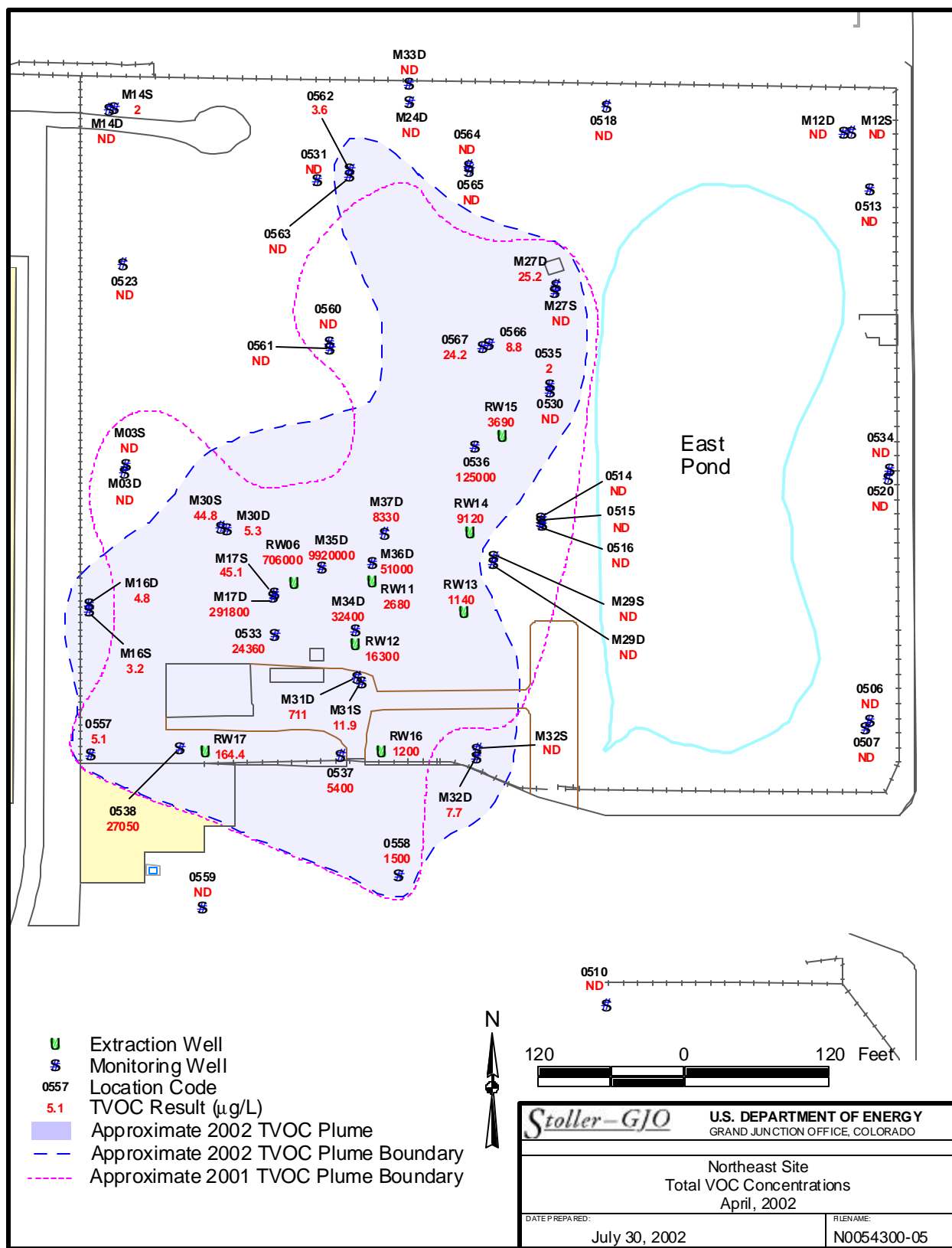


Figure 16. TVOCs at the Northeast Site in April 2002

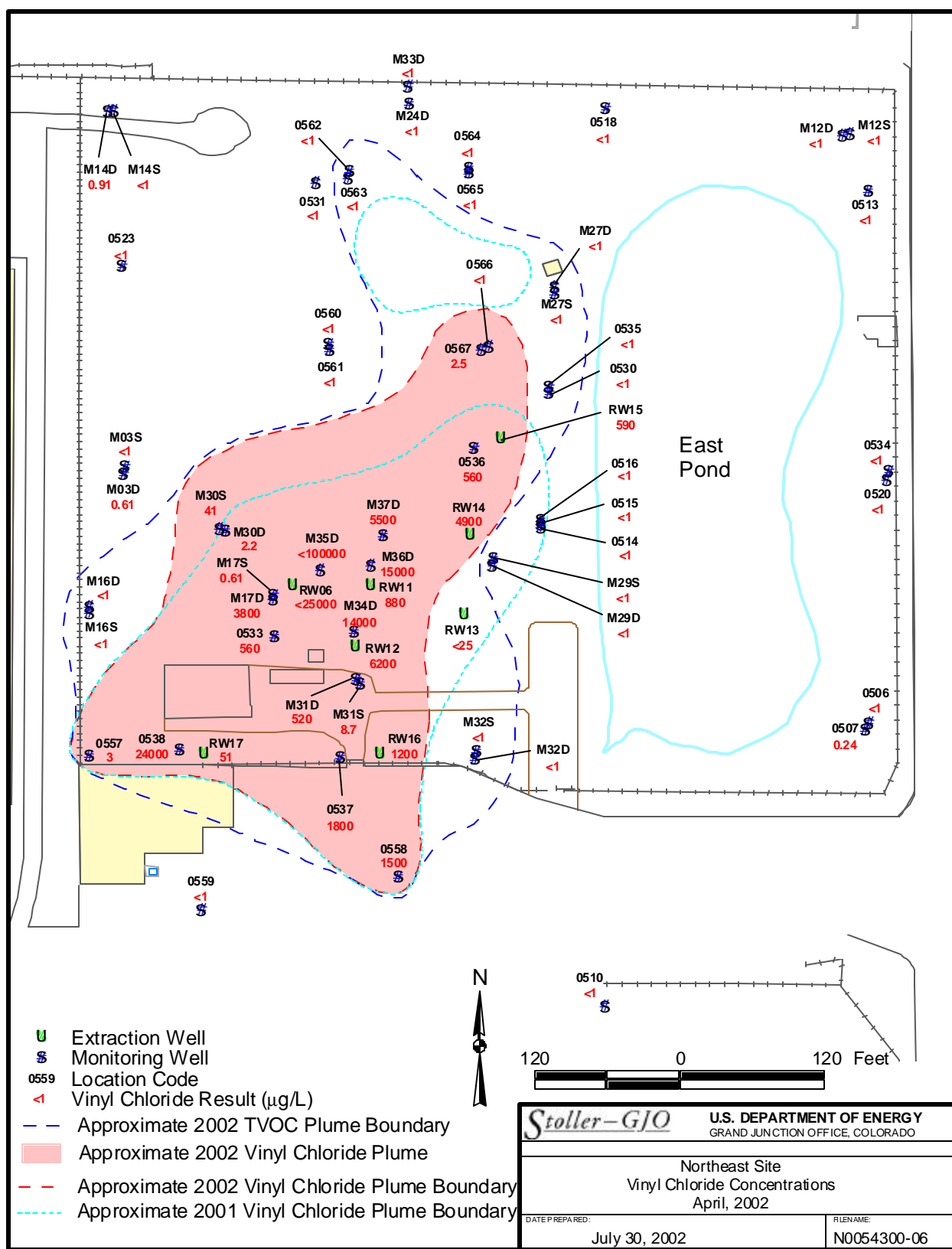
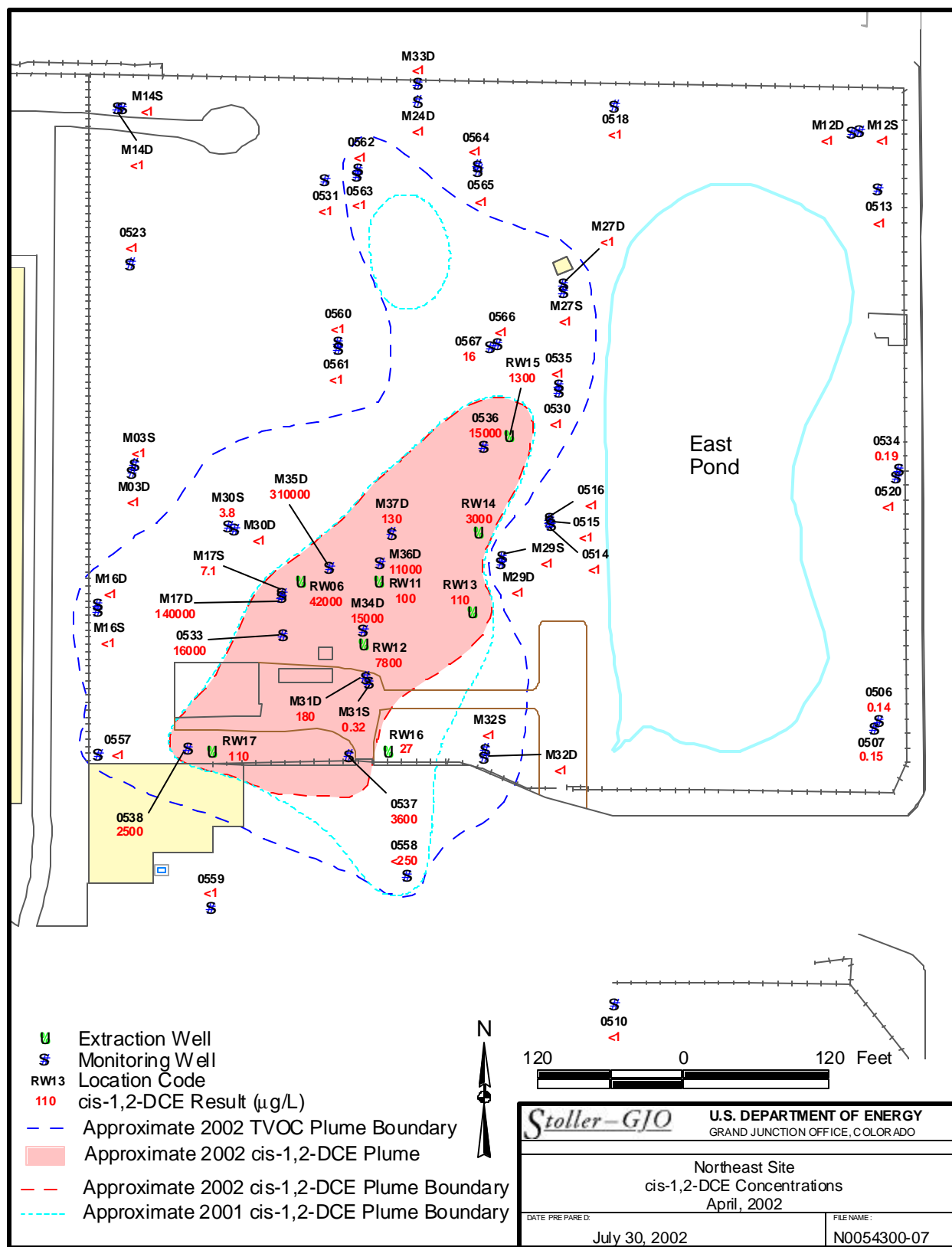
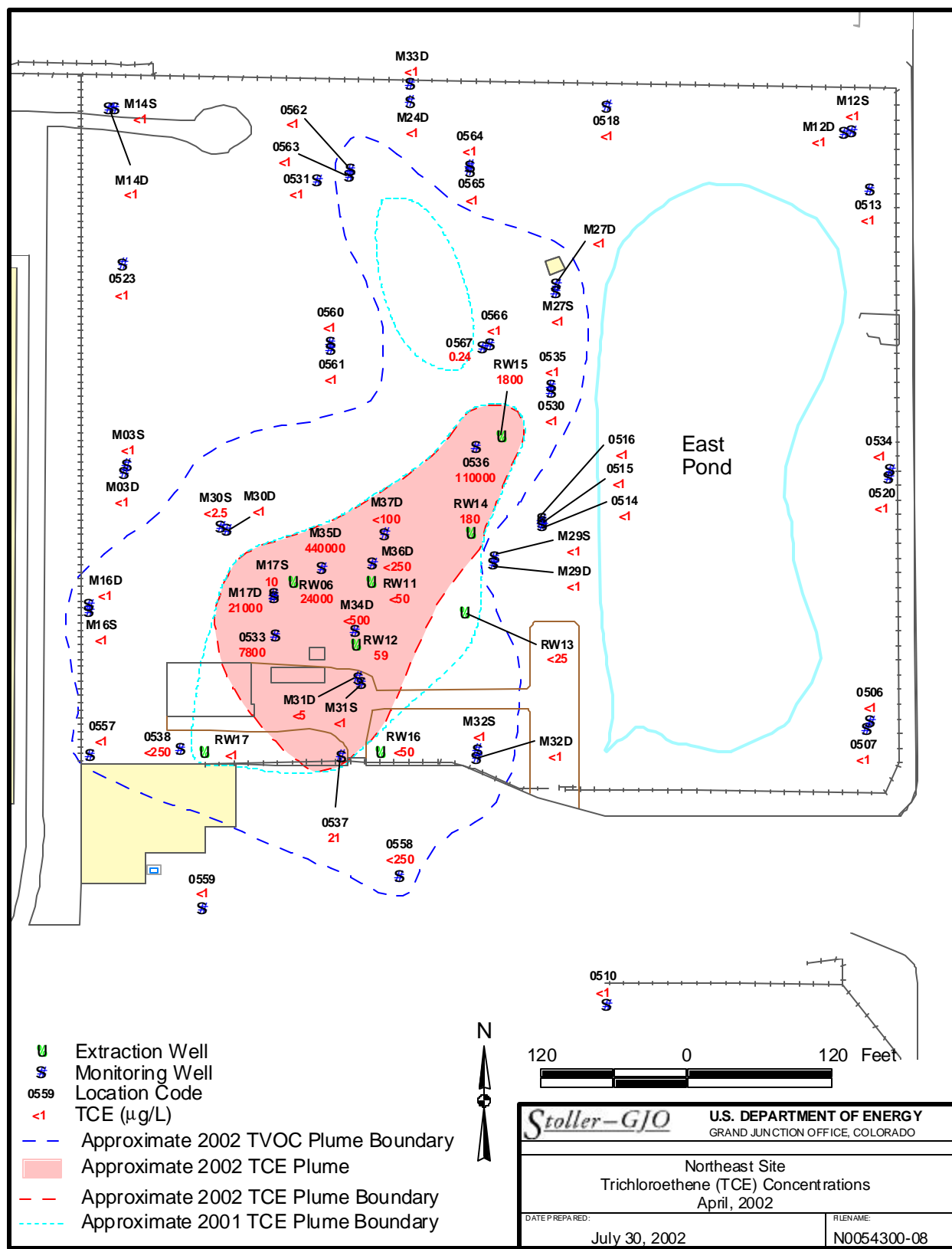


Figure 17. Vinyl Chloride Concentrations at the Northeast Site in April 2002



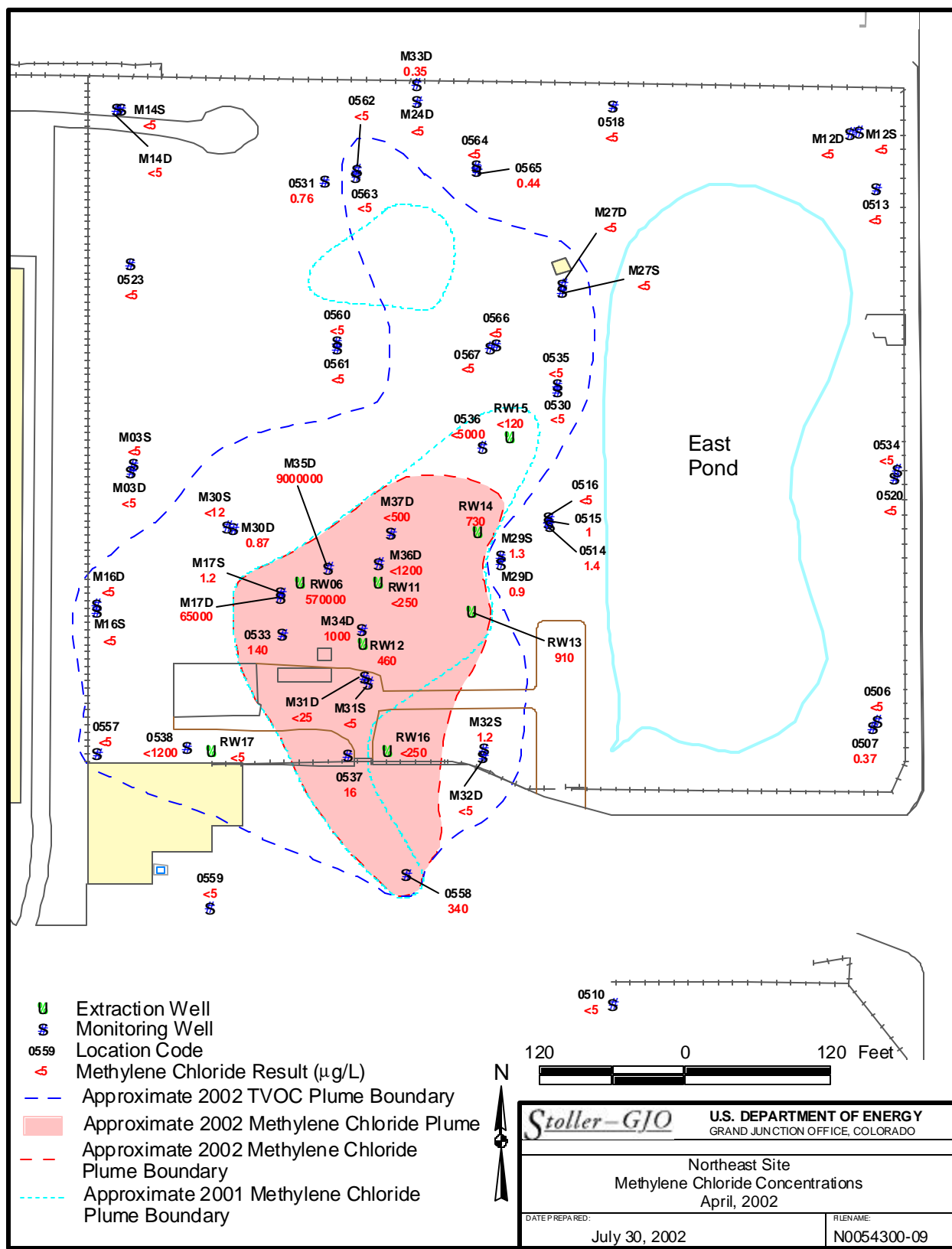
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Figure 18. Cis-1,2-DCE Concentrations at the Northeast Site in April 2002



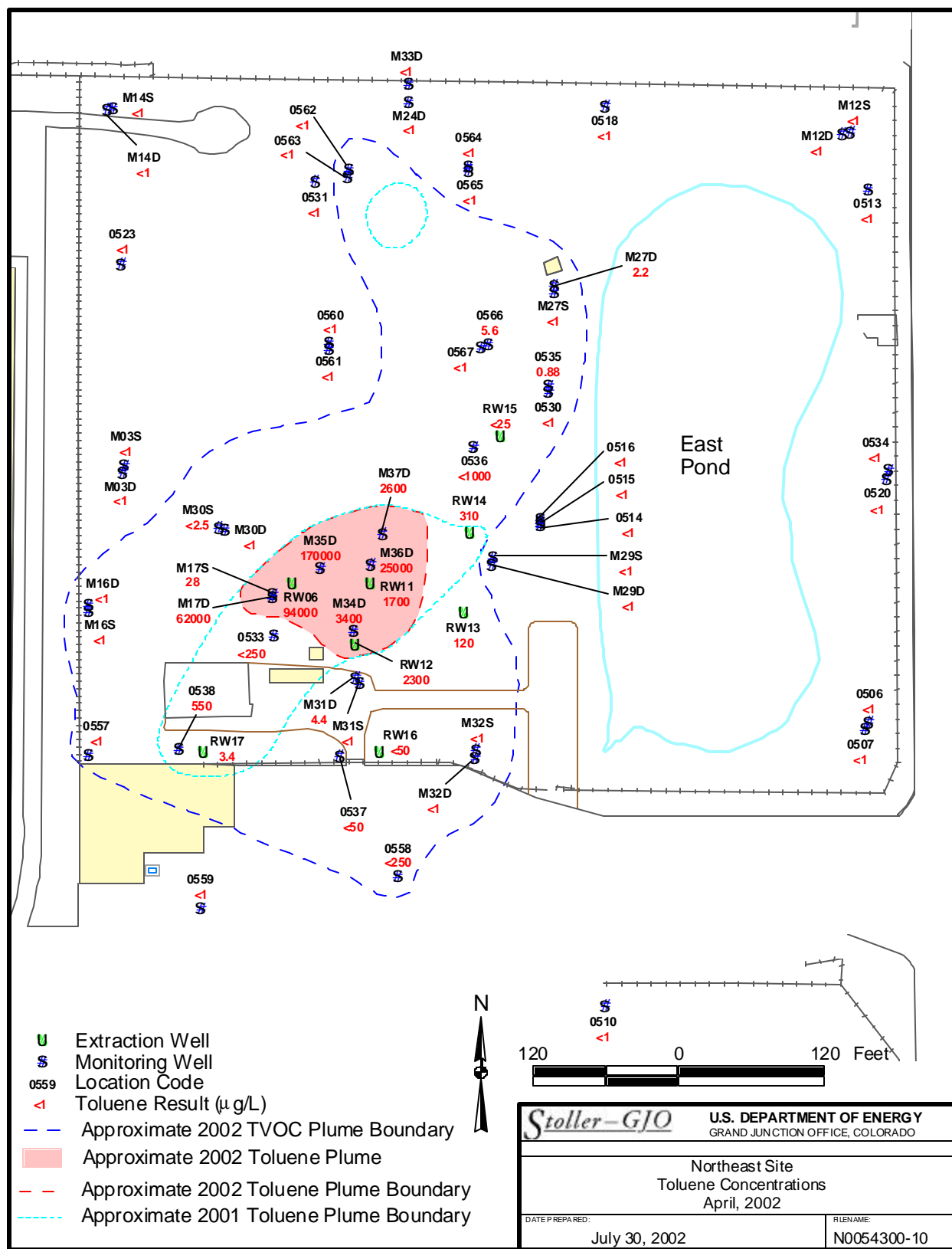
m:\pin\041\001 003\m00543\m0054300.apr smithw 7/30/2002, 12:24

Figure 19. TCE Concentrations at the Northeast Site in April 2002



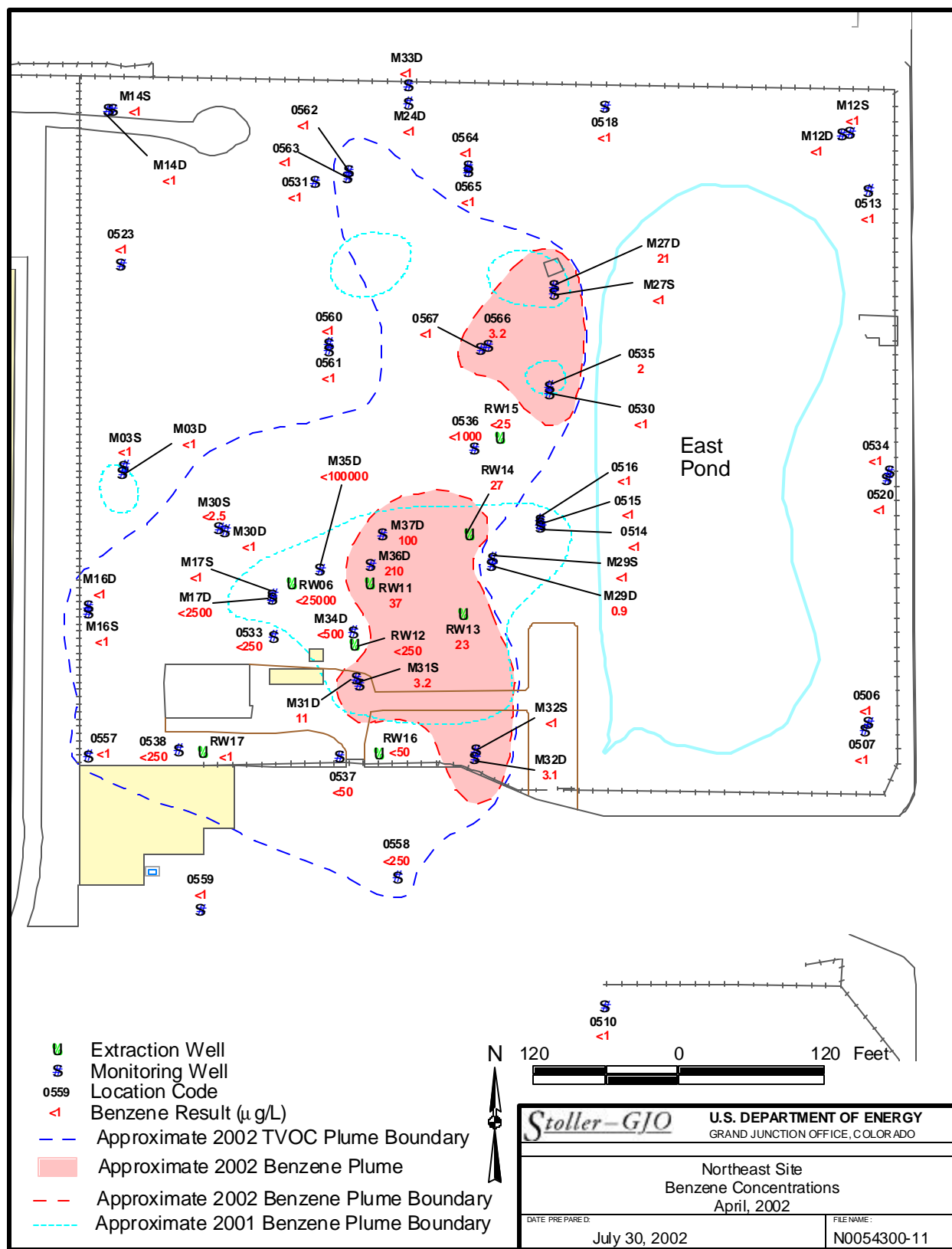
m:\pin\041\010\03\0054300\0054300.apr smithw 7/30/2002, 13:47

Figure 20. Methylene Chloride Concentrations at the Northeast Site in April 2002



m:\pin\041\001 003\m0054300.n0054300.apr smithw 7/30/2002, 13:48

Figure 21. Toluene Concentrations at the Northeast Site in April 2002



m:\pin\041\001 003\m00543\m0054300.apr smithw 7/30/2002, 13:48

Figure 22. Benzene Concentrations at the Northeast Site in April 2002

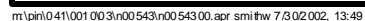


Figure 23. Vinyl Chloride Concentrations at the Building 100 Area in April 2002

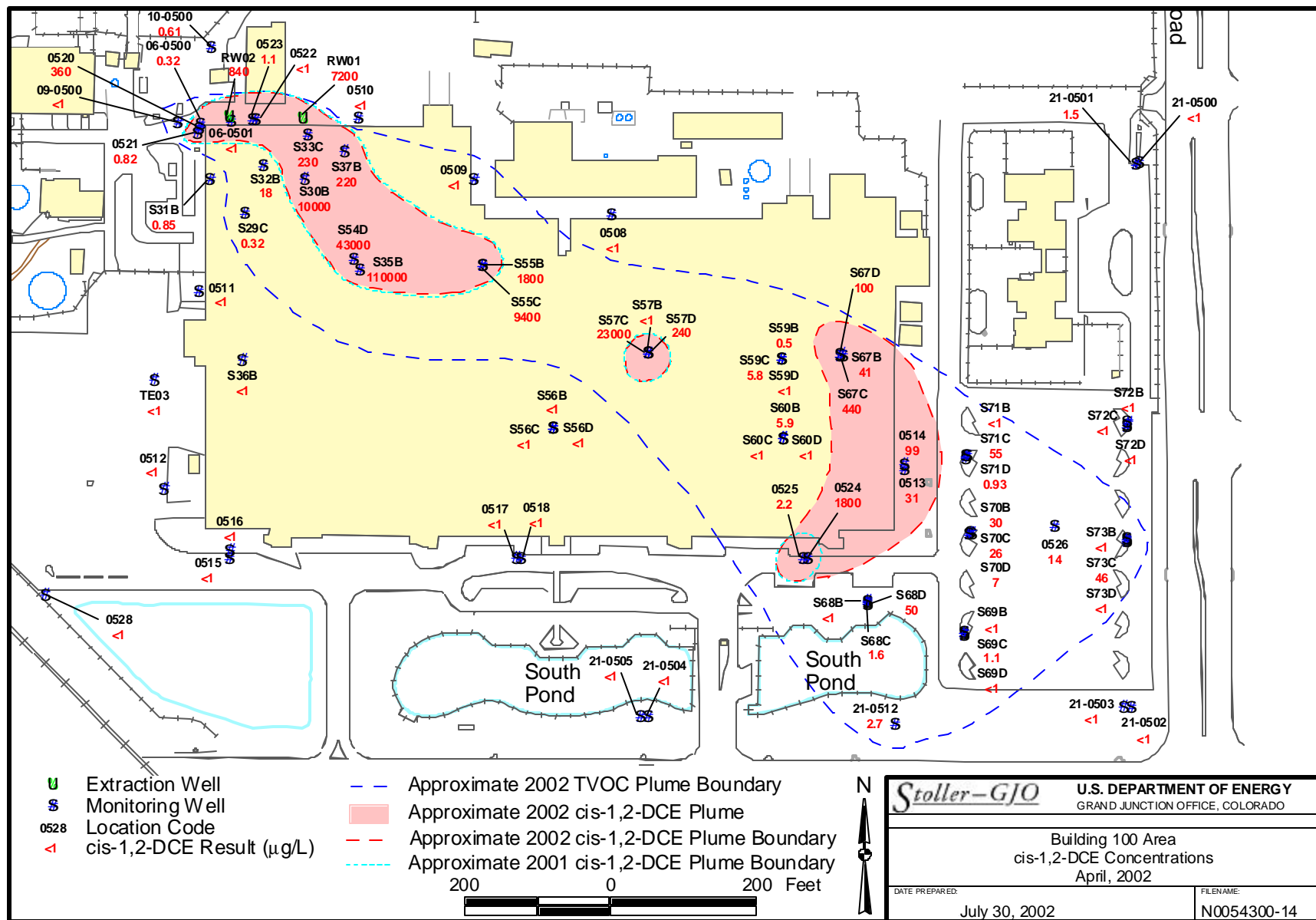


Figure 24. Cis-1,2-DCE Concentrations at the Building 100 Area in April 2002

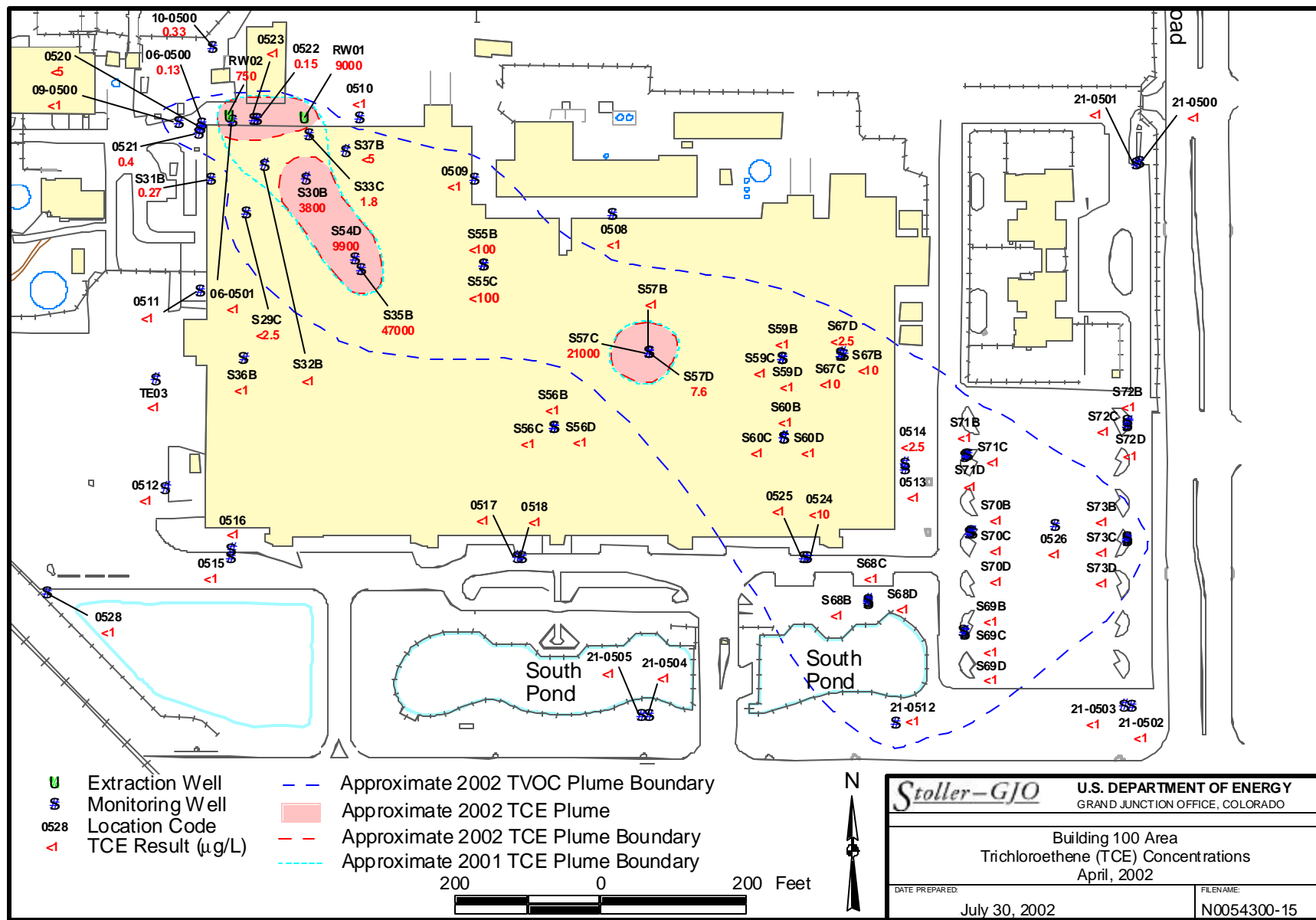


Figure 25. TCE Concentrations at the Building 100 Area in April 2002

*Table 1. WWNA Recovery Well Startup Monitoring Arsenic Concentrations
(reported in milligrams per liter)*

Sample Date	RW02	RW03	RW02/RW03 Combined Effluent
2/26/2001	0.08	0.1	0.095
2/27/2001	0.074	0.1	0.091
2/28/2001	0.074	0.091	0.074
3/1/2001	0.084	0.096	0.088
3/2/2001	0.088	0.095	0.089
3/5/2001	0.13	0.22	0.1
3/12/2001	0.37	0.11	0.13
3/19/2001	0.42	0.12	0.12
3/26/2001	0.15	0.16	0.8
4/2/2001	0.18	0.12	0.13
4/16/2001	0.18	0.17	0.13
5/1/2001	0.16	0.071	0.1
5/15/2001	0.14	0.15	0.093
5/30/2001	0.13	0.07	0.16
6/11/2001	0.11	0.068	0.083
6/26/2001	0.13	0.067	0.096
7/9/2001	0.14	0.054	0.087
7/23/2001	0.14	0.25	0.074
8/6/2001	0.11	0.2	0.18
8/21/2001	0.13	0.074	0.084
9/5/2001	0.13	0.054	0.091
10/8/2001	0.11	0.14	0.07
11/6/2001	0.095	0.053	0.076
12/7/2001	0.13	0.081	0.084
1/10/2002	0.11	0.081	0.076
2/5/2002	0.11	0.055	0.075
3/6/2002	0.12	0.05	0.076
4/2/2002	0.084	0.055	0.069
4/15/2002	–	0.049	–
4/16/2002	0.078	–	–
5/8/2002	0.11	0.048	0.071
6/4/2002	0.095	0.078	0.058

– = Not measured

Table 2. Northeast Site NAPL Remediation Area A Wells Abandoned

Location ID	Borehole Depth (ft)	Borehole Diameter (in.)	Casing Length (ft)	Casing Diameter (in.)	Screen Depth (ft)	Screen Length (ft)
Monitoring Wells						
0502	12.5	6.8	15.4	2.0	2.5	9.5
0503	28.0	6.8	30.8	2.0	-	9.5
B002	33.0	4.0	34.5	2.0	8.0	25.0
B003	32.0	4.0	33.6	2.0	7.0	25.0
B004	32.0	4.0	33.7	2.0	7.0	25.0
B005	32.0	4.0	34.0	2.0	7.0	25.0
M18D	32.5	10.0	34.8	2.0	22.0	10.0
M18S	15.0	9.5	17.4	2.0	5.0	9.5
M26D	30.3	10.0	32.7	2.0	19.8	10.0
M26S	15.5	10.0	17.4	2.0	5.0	10.0
M28D	29.0	10.0	30.8	2.0	18.5	10.0
M28S	14.0	10.0	15.9	2.0	3.5	10.0
0558	31.5	6.8	31.5	2.0	31.0	10.0
Recovery Wells						
NRW1	29.0	7.0	28.5	4.0	18.0	10.0
NRW2	27.3	10.0	28.8	4.0	16.5	10.0
RW08	30.0	6.0	30.0	4.0	10.0	20.0
RW09	30.0	4.5	32.8	3.0	10.0	19.5
DRW5	25.5	15.5	25.8	6.0	15.0	10.0
NRW4	25.0	7.0	24.0	4.0	24.0	10.0
Cased Boreholes						
LBNLG9	33.0	7.0	33.0	2.0	None	None
LBNLG10	33.0	7.0	33.0	2.0	None	None
LBNLG11	33.0	7.0	33.0	2.0	None	None
Piezometers						
Northern	Unknown	Unknown	5.4	6.0	Unknown	Unknown
Middle	Unknown	Unknown	3.6	6.0	Unknown	Unknown
Southern	Unknown	Unknown	3.2	6.0	Unknown	Unknown
Adjacent NRW4	26.0	7.0	25.2	2.0	25.0	10.0
Shallow	280.0	Unknown	280.0	4.0	16.0	30.0
Deep	280.0	Unknown	280.0	4.0	26.0	30.0

Table 3. Building 100 Area Well Point Abandonment

Well Point Location ID	Depth (ft below land surface)	Screen Interval (ft below land surface)
PIN12-S61B	20.3	10 – 19.8
PIN12-S61C	30.8	20.5 – 30.3
PIN12-S61D	41.3	31 – 40.8
PIN12-S62B	20.3	10 – 19.8
PIN12-S62C	30.8	20.5 – 30.3
PIN12-S62D	41.3	31 – 40.8
PIN12-S63B	20.3	10 – 19.8
PIN12-S63C	30.8	21 – 30.8
PIN12-S63D	41.3	28 – 37.8
PIN12-S64B	20.3	10 – 19.8
PIN12-S64C	30.8	20.5 – 30.3
PIN12-S64D	41.3	31 – 40.8
PIN12-S65B	20.3	10 – 19.8
PIN12-S65C	30.8	20.5 – 30.3
PIN12-S65D	41.3	31 – 40.8
PIN12-S66B	20.3	10 – 19.8
PIN12-S66C	30.8	20.5 – 30.3
PIN12-S66D	41.3	31 – 40.8

Table 4. Water-Level Data at the STAR Center

Location	Measurement		Water Depth From Land Surface (ft)	Ground Water Elevation (ft NGVD)
	Date	Time		
PIN02	West Pond			
502D	4/8/2002	09:32	4.74	13.76
W002	4/8/2002	09:19		15.25
PIN05	Trench Site			
0500	4/8/2002	09:16	4.48	14.02
PIN06	Old Drum Storage Site			
0500	4/8/2002	13:34	4.31	13.69
0501	4/8/2002	13:26	4.94	13.36
PIN09	Incinerator Site			
0500	4/8/2002	13:40	4.1	13.87
PIN10	Incinerator Ditch			
0500	4/8/2002	13:31	3.8	14.1
PIN12	Industrial Drain Leaks Building 100			
0508	4/8/2002	13:16	4.19	14.17
0509	4/8/2002	13:15	4.21	13.83
0510	4/8/2002	13:30	4.8	13.26
0511	4/8/2002	10:05	4.24	13.56
0512	4/8/2002	10:07	2.96	13.85
0513	4/8/2002	12:58	4.9	13.6
0514	4/8/2002	12:58	4.94	13.56
0516	4/8/2002	10:08	4.27	13.73
0517	4/8/2002	14:43	3.97	13.93
0518	4/8/2002	14:42	4.1	13.84
0520	4/8/2002	13:35	5.05	12.96
0521	4/8/2002	13:37	4.96	13.09
0522	4/8/2002	13:28	5.73	12.47
0523	4/8/2002	13:27	5.72	12.44
0524	4/8/2002	14:39	3.79	13.62
0525	4/8/2002	14:40	3.84	13.58
0526	4/8/2002	11:21	3.55	13.27
0527	4/8/2002	13:10	12.04	6.03
0528	4/8/2002	10:11	11.79	5.81
RW01	4/8/2002	13.23	17.17	1.08
RW02	4/8/2002	13.25	8.87	9.46
S29C	4/8/2002	14:50	5.22	13.29
S30B	4/8/2002	14:39	5.27	13.24
S31B	4/8/2002	14:57	5.01	13.5
S32B	4/8/2002	14:46	5.24	13.27
S33C	4/8/2002	14:44	5.37	13.14
S35B	4/8/2002	14:24	5.16	13.35
S36B	4/8/2002	15:01	4.97	13.54
S37B	4/8/2002	14:43	5.36	13.15
S54D	4/8/2002	14:30	4.84	13.67
S55B	4/8/2002	14:11	4.73	13.78
S55C	4/8/2002	14:13	4.67	13.84

Table 4 (continued). Water-Level Data at the STAR Center

Location	Measurement		Water Depth From Land Surface (ft)	Ground Water Elevation (ft NGVD)
	Date	Time		
S55D	4/8/2002	14:15	12.84	5.67
S56B	4/8/2002	14:03	4.36	14.15
S56C	4/8/2002	14:04	4.58	13.93
S56D	4/8/2002	14:05	4.71	13.8
S57B	4/8/2002	13:56	4.57	13.94
S57C	4/8/2002	13:57	4.56	13.95
S57D	4/8/2002	13:58	4.58	13.93
S59B	4/8/2002	13:25	4.39	14.12
S59C	4/8/2002	13:26	4.39	14.12
S59D	4/8/2002	13:28	4.54	13.97
S60B	4/8/2002	13:20	4.65	13.86
S60C	4/8/2002	13:20	4.67	13.84
S60D	4/8/2002	13:21	4.36	14.15
S67B	4/8/2002	13:04	4.57	13.9
S67C	4/8/2002	13:06	4.53	13.94
S67D	4/8/2002	13:05	4.65	13.83
S68B	4/8/2002	11:05	4.43	13.47
S68C	4/8/2002	11:08	4.45	13.45
S68D	4/8/2002	11:04	4.54	13.36
S69B	4/8/2002	11:12	3.09	12.91
S69C	4/8/2002	11:12	2.91	13.09
S69D	4/8/2002	11:12	3.07	12.93
S70B	4/8/2002	11:17	3.29	13.41
S70C	4/8/2002	11:18	3.29	13.41
S70D	4/8/2002	11:19	3.36	13.34
S71B	4/8/2002	11:25	4.97	13.43
S71C	4/8/2002	11:25	5	13.4
S71D	4/8/2002	11:26	3.84	14.56
S72B	4/8/2002	10:48	5.13	13.07
S72C	4/8/2002	10:46	5.1	13.1
S72D	4/8/2002	10:45	5.11	13.09
S73B	4/8/2002	10:54	3.9	13.1
S73C	4/8/2002	10:53	3.98	13.02
S73D	4/8/2002	10:52	4.01	12.99
TE03	4/8/2002	10:04	3.38	13.62
PIN15	Northeast Site			
0502	4/8/2002	10:07	6.64	11.16
0503	4/8/2002	10:05	7.03	10.97
0506	4/8/2002	08:30	3.48	13.52
0507	4/8/2002	08:33	3.49	13.51
0510	4/8/2002	11:18	3	14.52
0513	4/8/2002	08:24	11.83	5.77
0514	4/8/2002	08:40	6.5	11
0515	4/8/2002	08:42	6.54	10.96
0516	4/8/2002	08:44	5.33	12.07

Table 4 (continued). Water-Level Data at the STAR Center

Location	Measurement		Water Depth From Land Surface (ft)	Ground Water Elevation (ft NGVD)
	Date	Time		
0518	4/8/2002	08:19	5.11	12.69
0520	4/8/2002	08:29	3.66	13.54
0523	4/8/2002	09:14	5.07	12.93
0530	4/8/2002	08:49	5.67	11.73
0531	4/8/2002	09:07	5.69	11.91
0533	4/8/2002	10:37	6.77	11.23
0534	4/8/2002	08:26	4.04	13.26
0535	4/8/2002	08:50	6.89	10.71
0536	4/8/2002	09:47	8.62	8.98
0537	4/8/2002	09:29	7.12	11.48
0538	4/8/2002	09:25	5.65	13.15
0557	4/8/2002	09:22	5.36	13.74
0558	4/8/2002	11:08	5.17	13.07
0559	4/8/2002	11:11	4.97	13.82
0560	4/8/2002	10:10	6.79	11.21
0561	4/8/2002	10:11	6.83	11.17
0562	4/8/2002	09:05	5.68	12.12
0563	4/8/2002	09:06	5.98	11.82
0564	4/8/2002	08:59	5.8	11.4
0565	4/8/2002	08:57	5.96	11.24
0566	4/8/2002	08:51	6.74	10.76
0567	4/8/2002	08:53	6.34	11.16
B002	4/8/2002	10:04	6.58	11.42
B003	4/8/2002	09:56	5.98	11.32
B004	4/8/2002	10:08	7.25	11.15
B005	4/8/2002	09:54	6.09	11.51
DRW5	4/8/2002	09:58	19	-1.4
E001	4/8/2002	08:38	2.23	13.79
M03D	4/8/2002	09:17	5.16	12.94
M03S	4/8/2002	09:16	5.19	12.91
M12D	4/8/2002	08:21	3.75	13.45
M12S	4/8/2002	08:22	4.04	13.46
M14D	4/8/2002	09:11	4.63	13.37
M14S	4/8/2002	09:10	4.63	13.37
M16D	4/8/2002	09:19	5.01	13.19
M16S	4/8/2002	09:21	5.01	13.19
M17D	4/8/2002	10:19	6.17	11.43
M17S	4/8/2002	10:16	5.98	11.52
M18D	4/8/2002	08:57	5.32	11.88
M18S	4/8/2002	08:55	5.62	11.58
M24D	4/8/2002	09:00	6.34	11.46
M26D	4/8/2002	10:03	6.68	11.02
M26S	4/8/2002	10:01	6.68	10.92
M27D	4/8/2002	08:15	5.67	11.93
M27S	4/8/2002	08:16	5.01	12.59

Table 4 (continued). Water-Level Data at the STAR Center

Location	Measurement		Water Depth From Land Surface (ft)	Ground Water Elevation (ft NGVD)
	Date	Time		
M28D	4/8/2002	09:52	7.14	10.46
M28S	4/8/2002	09:50	6.82	10.88
M29D	4/8/2002	09:39	7.41	10.19
M29S	4/8/2002	09:42	6.43	11.17
M30D	4/8/2002	10:13	5.53	12.37
M30S	4/8/2002	10:14	5.35	12.45
M31D	4/8/2002	10:49	8.61	9.39
M31S	4/8/2002	10:50	8.69	9.31
M32D	4/8/2002	09:32	6.12	11.68
M32S	4/8/2002	09:34	6.07	11.73
M33D	4/8/2002	09:03	3.28	14.32
M34D	4/8/2002	10:46	10.23	7.87
M35D	4/8/2002	10:35	7.15	10.85
M36D	4/8/2002	10:43	7.79	10.01
M37D	4/8/2002	10:44	7.68	10.32
NRW4	4/8/2002	09:37	5.82	11.38
RW03	4/8/2002	10:40	7.69	10.21
RW04	4/8/2002	10:53	9.11	8.49
RW06	4/8/2002	10:20	6.94	11.06
RW07	4/8/2002	10:55	9.81	7.79
RW08	4/8/2002	09:55	11.6	6.1
RW10	4/8/2002	10:21	8.03	9.87
RW11	4/8/2002	10:42	8.42	9.58
RW12	4/8/2002	10:48	16.58	1.72
RW13	4/8/2002	09:38	11.73	5.87
RW14	4/8/2002	09:44	15.86	2.04
RW15	4/8/2002	09:45	17.23	-0.03
RW16	4/8/2002	09:31	6.72	11.28
RW17	4/8/2002	09:26	5.9	12.9
PIN18	Wastewater Neutralization Area			
0500	4/8/2002	13:56	8.06	12.04
0501	4/8/2002	13:57	7.22	12.78
0502	4/8/2002	13:58	6.58	13.42
0503	4/8/2002	09:55	4.16	13.52
0504	4/8/2002	13:59	5.34	14.26
0505	4/8/2002	09:48	4.76	13.12
0506	4/8/2002	09:46	4.16	13.55
0507	4/8/2002	09:55	4.14	13.59
0508	4/8/2002	14:00	5.31	14.19
0509	4/8/2002	09:49	4.63	13.2
0510	4/8/2002	09:45	4.3	13.46
0511	4/8/2002	14:10	3.89	14.91
0512	4/8/2002	14:08	3.67	14.93
0513	4/8/2002	14:09	3.86	14.94
0514	4/8/2002	09:57	4.07	13.71

Table 4 (continued). Water-Level Data at the STAR Center

Location	Measurement		Water Depth From Land Surface (ft)	Ground Water Elevation (ft NGVD)
	Date	Time		
0515	4/8/2002	09:57	4.69	13.72
0516	4/8/2002	09:58	4.76	13.65
0517	4/8/2002	10:01	4.53	13.72
0518	4/8/2002	10:00	4.62	13.58
0519	4/8/2002	10:02	4.6	13.68
0520	4/8/2002	13:47	5.89	12.11
0521	4/8/2002	13:45	5.23	12.87
0522	4/8/2002	13:46	5.96	12.14
0523	4/8/2002	13:52	6.17	13.23
0524	4/8/2002	13:50	5.91	13.09
0525	4/8/2002	13:49	5.77	13.13
0526	4/8/2002	14:13	3.86	14.74
RW02	4/8/2002	13:55	10.99	9.11
RW03	4/8/2002	13:54	10.38	7.92
PIN21	Perimeter Monitoring Wells			
0500	4/8/2002	10:37	4.74	13.36
0501	4/8/2002	10:36	4.71	13.29
0502	4/8/2002	10:59	2.55	12.65
0503	4/8/2002	10:59	2.47	12.73
0504	4/8/2002	14:51	4.42	13.18
0505	4/8/2002	14:50	4.17	13.23
0512	4/8/2002	11:02	4.23	13.07
PIN23	Southwest Pond			
SW01	4/8/2002	14:47		13.34
PIN37	South Pond			
S001	4/8/2002	14:48		13.36

Table 5. Floridan Aquifer Monitoring Well Water Elevations

Well Identification	Previous Water Level Elevation (ft, MSL)	Current Water Level Elevation (ft, MSL)
PIN15-0513	7.14	5.77
PIN12-0527	7.34	6.03
PIN12-0528	7.19	5.81

Table 6. Vertical Hydraulic Differential

Water Level Measured From	Well Identification	Water Level Elevation (ft, MSL)
Deep Surficial Aquifer	PIN15-M12D	13.45
Floridan Aquifer	PIN15-0513	5.77

Table 7. Surface Water Elevations

Pond Location	Previous Water Level Elevation (ft, MSL)	Current Water Level Elevation (ft, MSL)
East Pond	13.81	13.79
South Pond	13.54	13.36
West Pond	15.25	15.25
Southwest Pond	13.52	13.34

Table 8. Field Measurements of Samples Collected at the STAR Center

Location	Temperature (°C)	Specific Conductance (µmhos/cm) ^a	Turbidity (NTU)	pH	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)
PIN05	Trench Site					
0500	23.27	601	8.5	6.45	133.2	2.46
PIN06	Old Drum Storage Site					
0500	24.91	748	0.5	6.54	-27.6	0.55
0501	24.17	966	1.7	6.31	95	0.61
PIN09	Incinerator Site					
0500	26.24	1,129	0.8	6.67	-25.9	0.57
PIN10	Incinerator Ditch					
0500	23.28	672	5.7	6.51	13	0.62
PIN12	Industrial Drain Leaks Building 100					
0508	23.49	553	3	6.52	76.9	0.6
0509	24.06	1,317	2.8	6.65	46.1	0.62
0510	25.2	973	5.8	6.07	119.4	0.78
0511	24.9	285	12.3	6.36	122	1.22
0512	27.15	554	0	6.48	-28	0.5
0513	23.61	813	0	6.61	-59	0.72
0514	24.05	1,489	19.2	6.48	-48	0.65
0515	25.43	678	0.8	6.74	-73	0.44
0516	25.33	1,046	19.7	6.61	0.2	0.43
0517	27.26	665	108	6.84	101	0.46
0518	27.37	703	40.8	6.67	-35	0.49
0520	25.83	1,397	87.1	6.61	-22	0.58
0521	25.68	907	5.3	6.78	-109	0.53
0522	24.8	1,311	29.1	6.55	-21.6	0.47
0523	24.45	930	13.7	6.62	-83.7	0.48
0524	26.39	1,207	7.2	6.53	-53	0.52
0525	26.13	751	6	6.73	-79.8	0.46
0526	29.45	1,899	15.3	6.76	-57.6	0.61
0527	28.4	1,414	4.3	6.77	-113.2	0.55
0528	24.7	1,124	2.1	6.93	-162.1	0.3
S29C	23.23	1,133	0.1	6.55	-55.7	0.49
S30B	22.95	1,180	1.8	6.65	46.3	1.91
S31B	23.97	713	15	6.69	9.8	0.52
S32B	22.94	1,003	2.6	6.53	79.9	0.66
S33C	22.76	1,173	117.6	6.57	-76.5	0.55
S35B	22.65	1,562	26.5	6.33	-28.7	0.6
S36B	23.74	607	8.6	6.29	-.6	0.86
S37B	22.23	906	52.3	6.56	42.1	0.91
S54D	23.12	1,375	259.2	6.61	-101.7	0.6
S55B	23.64	534	220.1	6.43	-96.7	0.59
S55C	23.71	697	373.1	6.9	-159.1	0.4
S56B	22.9	1,406	1,150.8	6.66	-116.1	0.5
S56C	22.96	1,439	701.7	6.83	-120.6	0.43
S56D	22.99	1,515	425	6.79	-89.6	0.48

Table 8 (continued). Field Measurements of Samples Collected at the STAR Center

Location	Temperature (°C)	Specific Conductance (µmhos/cm) ^a	Turbidity (NTU)	pH	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)
S57B	23.26	1,189	547.1	6.82	-104	0.74
S57C	23.4	961	275.5	6.69	-128.8	0.62
S57D	23.22	1,356	328.9	6.6	-72.2	0.64
S59B	21.55	1,014	141.3	7.52	-100.2	6.51
S59C	21.38	997	225.1	9.46	-87.2	1.77
S59D	21.61	904	111.1	8.85	-8.3	1.54
S60B	22.99	8.63	26.8	7.33	-111.7	7.62
S60C	22.31	701	279.4	8.23	-13.3	--
S60D	22.68	894	182	8.52	52.6	3.67
S67B	21.92	1,233	84.2	6.6	-12.2	0.74
S67C	22.26	1,239	131	6.56	-31.7	0.66
S67D	22.39	1,389	257.5	6.59	-49.7	0.66
S68B	24.4	1,006	442	6.37	21.9	1.02
S68C	25.96	985	194.2	6.71	-83.3	3.29
S68D	25.2	1,305	644	6.56	-43.5	--
S69B	27.54	685	705	6.04	12.5	1.11
S69C	27.98	1,119	1,999	6.82	-135	0.73
S69D	28.07	1,407	16.6	6.6	-94.8	0.87
S70B	27.22	1,778	142	5.89	8.3	1.22
S70C	28.15	1,453	1,876	6.68	-128	0.79
S70D	28.16	1,448	376	6.58	-107	0.85
S71B	27.74	1,278	230	6.54	-88	0.82
S71C	28.41	1,441	1,653	6.62	-121	0.73
S71D	28.72	1,354	1,256	6.57	-93	0.85
S72B	28.74	1,156	51.5	6.15	-29	1.1
S72C	27.23	814	361.4	6.86	-126.7	0.95
S72D	28.13	1,327	>1,000	6.66	-88.5	0.97
S73B	27.9	1,140	708	6.55	-79.8	0.88
S73C	28.64	1,399	1,660	6.54	-99.1	0.9
S73D	28.8	1,352	2,125	6.63	-101	0.92
TE03	27.55	745	3.9	6.65	-49.3	0.51
PIN15	Northeast Site					
0506	24.62	1,128	5.9	6.65	-10.7	0.5
0507	24.34	880	6.3	6.7	-15.8	0.5
0510	26.94	991	5.1	6.6	121.6	0.57
0513	24.9	1,262	0.8	6.78	-178.2	1.37
0514	24	1,543	1.7	6.46	16.9	0.45
0515	23	378	3.5	7.01	-100.9	0.31
0516	24.8	371	1.9	7.08	-40.7	1.47
0518	24.8	1,725	4.4	6.46	-25.6	0.48
0520	24.63	620	2.1	6.59	4.6	0.84
0523	23.86	1,111	19.7	6.59	-146.3	0.56
0530	23	339	38.9	7.02	-109.8	0.42
0531	23.6	1,995	12.6	6.42	-51.3	1.02

Table 8 (continued). Field Measurements of Samples Collected at the STAR Center

Location	Temperature (°C)	Specific Conductance (µmhos/cm) ^a	Turbidity (NTU)	pH	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)
0533	24.05	590	63.1	6.45	-65.4	1.28
0534	25.94	1,629	11.5	6.53	56.5	0.66
0535	24	1,681	67.8	6.43	-17.1	0.71
0536	24.2	1,507	19.5	6.44	-42.1	0.88
0537	26.94	743	0.1	6.48	-62.2	0.74
0538	23.48	785	21.9	6.32	-59.6	0.32
0557	23.95	727	14.2	6.6	62.7	0.48
0558	26.9	1,208	9.8	6.45	-7.4	0.42
0559	27.71	1,317	22.9	6.56	155.5	0.56
0560	23.9	1,022	10.5	6.49	-66.7	0.89
0561	23.7	1,226	40.4	6.46	-17.8	0.84
0562	25	1,428	19.9	6.54	-74.7	0.6
0563	24.5	2,507	10.8	6.52	-41.6	0.89
0564	25.2	1,653	11.1	6.51	-39.4	0.6
0565	24.9	1,069	21.7	6.46	-9.5	0.67
0566	23.9	1,773	15.2	6.41	-49.8	0.76
0567	23.7	963	78.8	6.63	-22.4	0.6
M03D	24.32	872	18.8	6.31	-69.7	0.67
M03S	23.78	850	2.7	6.47	-31.7	0.82
M12D	25.3	882	20.9	6.61	-53.7	0.54
M12S	24.7	386	25.3	6.9	35.7	1.6
M14D	25.15	910	52.9	6.47	-41.7	0.47
M14S	23.97	800	11.8	6.6	2.9	0.41
M16D	25.14	542	7.8	6.57	-76.7	0.49
M16S	24.46	472	403.3	6.74	-82.8	0.51
M17D	25.21	802	0	6.26	-153.3	0.3
M17S	25.12	673	17.2	6.7	-76.5	—
M24D	24.9	1,441	2,054.4	6.56	-141.4	0.56
M27D	24.5	1,790	38.3	6.35	-1.3	0.53
M27S	23.2	341	2.9	6.99	-75.8	0.44
M29D	24.1	266	4.3	6.16	-26.8	0.41
M29S	23.5	439	13.3	6.79	0.2	0.52
M30D	25.11	823	3.6	6.39	-56.9	0.47
M30S	23.87	852	0	6.34	-50.3	0.49
M31D	24.33	799	4.2	6.47	45.8	0.43
M31S	24.43	668	54.1	6.59	-80.2	0.56
M32D	25.5	1,471	2	6.4	-41.6	0.59
M32S	24.5	1,221	2	6.6	15.9	1.28
M33D	24.9	621	52.4	6.57	-32.3	0.48
M34D	24.19	924	4.6	6.2	-63.6	0.23
M35D	24.6	3,709	10.9	5.92	17.5	1.48
M36D	24.45	1,796	2.7	5.91	-61.9	0.44
M37D	24.36	1,303	11.2	5.89	-49.3	0.51
RW12	29.3	806	6.9	6.36	-111.4	0.17

Table 8 (continued). Field Measurements of Samples Collected at the STAR Center

Location	Temperature (°C)	Specific Conductance (µmhos/cm) ^a	Turbidity (NTU)	pH	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)
RW13	26.64	740	0.1	6.14	-11.7	0.14
RW14	30.24	710	7.4	6.17	-84.2	0.18
RW15	26.07	976	213.5	6.39	2.9	0.24
RW16	26.59	88	55.7	7.51	-15.7	8.85
RW17	23.87	907	6.7	6.24	-93.4	0.19
PIN18	Wastewater Neutralization Area					
0500	23.4	409	18.6	7.09	-132.5	0.3
0501	23.9	832	5	6.72	-118.7	0.54
0502	23.6	772	5.2	6.58	-75	0.52
0503	26.3	835	6.9	6.59	-107.4	0.53
0504	25	413	3.9	6.75	-45	0.37
0505	26.25	676	9	6.72	-80.7	0.57
0506	26.4	557	4	6.71	-94.1	0.44
0507	27.2	1,362	20.7	6.71	-62.6	0.55
0508	25.6	676	11.4	6.6	-71	0.11
0509	27.1	1,251	20	6.71	-45.8	0.53
0510	27.3	1,177	116.2	6.68	-71.6	0.48
0511	26.5	1,239	3.6	6.63	-80.1	0.36
0512	27.2	1,123	1.9	6.52	-85	0.37
0513	26.3	782	20.4	6.36	-36.5	0.49
0514	27.6	1,382	35.5	6.56	-46.8	0.53
0515	27.1	1,192	15.2	6.58	-98.5	0.53
0516	26.6	1,194	5.9	6.54	-88.3	0.54
0517	28.1	1,506	17.8	6.71	-16.7	0.51
0518	28.2	1,399	18.8	6.6	-82.9	0.52
0519	27.4	869	6.8	6.68	-97.6	0.48
0520	26	1,393	35.9	6.7	-10.5	0.4
0521	25.3	860	9.2	6.61	-85.4	0.44
0522	24.7	678	30	6.54	-51.7	0.43
0523	25.1	685	67.3	6.43	-39.9	0.15
0524	25.1	428	19.6	6.48	-85.5	0.15
0525	23.8	319	15.3	6.51	176	0.75
0526	24.8	416	66.3	6.34	-50.6	0.15
RW02	25	602	0.1	6.74	-100.3	1.04
RW03	25.8	664	2.6	6.54	-78.9	0.7
PIN21	Perimeter Monitoring Wells					
0500	25.73	690	21	6.56	61.3	1.39
0501	26.82	1,361	10.1	6.56	76.9	1.06
0502	24.23	796	1.1	6.55	-1.2	0.49
0503	25.47	837	45.4	6.59	-62.3	0.47
0504	22.72	811	47.5	6.75	-83	0.58
0505	23.64	1,002	6.9	6.59	-9	0.53
0512	24.87	929	46.2	6.6	-39.8	0.44

^atemperature corrected to 25°C

– = Not measured

*Table 9. VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
PIN05		Trench Site								
0500	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0500	4/10/2002	<1	<1	<1	<1	<1	<1	<1	0.41J	ND
PIN06		Old Drum Storage Site								
0500	4/12/2001	<1	0.14J	<1	<1	0.28J	<1	<1	0.53J	3 ^c
0500	1/16/2002	0.17J	1.1	<1	<1	<1	0.18J	<1	0.64J	1.1 ^c
0500	4/12/2002	0.13J	0.32J	<1	<1	<1	<1	0.84J	0.34J	ND ^c
0501	4/12/2001	0.18J	<1	<1	<1	<1	<1	<1	0.36J	2.1 ^c
0501	1/16/2002	<1	0.2J	<1	<1	<1	<1	<1	1.6J	10.5 ^c
0501	4/12/2002	<1	<1	<1	<1	<1	<1	<1	<5	11.4 ^c
PIN09		Incinerator Site								
0500	4/12/2001	<1	0.15J	<1	<1	0.54J	<1	<1	0.36J	4.4 ^c
0500	1/15/2002	0.25J	0.24J	<1	<1	<1	<1	<1	0.59J	1.7 ^c
0500	4/12/2002	<1	<1	<1	<1	<1	<1	2.8	<5	2.8
PIN10		Incinerator Ditch								
0500	4/12/2001	0.37J	0.66J	<1	<1	<1	0.25J	<1	0.32J	ND
0500	1/14/2002	0.8J	0.64J	<1	<1	<1	<1	<1	<5	ND
0500	4/12/2002	0.33J	0.61J	<1	<1	<1	<1	<1	<5	ND
PIN12		Industrial Drain Leaks Building 100								
0508	4/12/2001	<1	<1	<1	<1	<1	<1	<1	2.8J	ND
0508	1/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0508	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0509	4/12/2001	<1	0.43J	<1	<1	2.3	<1	<1	0.31J	21.3 ^c
0509	10/10/2001	<1	0.8J	<1	<1	<1	<1	<1	0.93J	11 ^c
0509	1/16/2002	44	<1	<1	<1	<1	<1	<1	<5	44
0509	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	110 ^c
0510	4/12/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND ^b
0510	10/10/2001	<1	1.1	<1	<1	3.2	<1	<1	4.3J	4.3
0510	1/16/2002	0.22J	0.17J	<1	<1	2	<1	<1	<5	2
0510	4/11/2002	<1	<1	<1	<1	<1	<1	<1	0.47J	ND
0511	4/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0511	1/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0511	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.55J	ND
0512	4/12/2001	<1	<1	<1	<1	<1	<1	<1	2.4J	ND
0512	1/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0512	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0513	4/7/2001	<1	21	1.7	0.31J	33	27	<1	<5	82.7
0513	7/11/2001	<1	8.1	0.88J	<1	19	16	<1	<5	43.1
0513	10/3/2001	0.18J	15	2.2	0.45J	24	22	<1	6.7	69.9
0513	1/9/2002	<1	19	1.9	0.47J	40	27	<1	<5	87.9
0513	4/11/2002	<1	31	2.1	0.58J	23	47	<1	<5	103.1
0514	4/12/2001	<2.5	57	68	0.43J	<2.5	19	<2.5	<12	144
0514	7/11/2001	<2.5	61	61	<2.5	110	16	<2.5	<12	248
0514	10/3/2001	<1	23	23	0.3J	33	6.2	<1	0.85J	85.2
0514	1/9/2002	<1	61	75	0.77J	120	17	<1	<5	273

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
0514	4/11/2002	<2.5	99	130	1.2J	97	38	<2.5	<12	364
0515	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.91J	ND
0515	10/7/2001	0.13J	<1	<1	<1	<1	<1	<1	1.3J	1.2 ^c
0515	1/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0515	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0516	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.76J	ND
0516	1/15/2002	<1	<1	<1	<1	3.1	<1	<1	<5	3.1
0516	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0517	4/7/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0517	1/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0517	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.63J	ND
0518	4/7/2001	<1	<1	<1	<1	3.2	<1	<1	<5	3.2
0518	7/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0518	10/7/2001	<1	<1	<1	<1	1.6	<1	<1	1.3J	1.6
0518	1/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0518	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.62J	ND
0520	4/12/2001	<10	510	<10	1.5J	82	<10	<10	5J	592
0520	7/13/2001	<10	440	<10	<10	59	<10	<10	32J	499 ^b
0520	10/10/2001	<5	210	<5	0.62J	78	<5	<5	<25	288 ^b
0520	1/16/2002	<5	270	<5	<5	110	<5	<5	5.1J	380 ^b
0520	4/12/2002	<5	360	<5	1.2J	100	<5	<5	2.6J	460 ^c
0521	4/12/2001	1.2	2	0.18J	0.15J	2.4	<1	<1	0.4J	25.9 ^c
0521	10/10/2001	<1	2.7	0.23J	<1	<1	0.15J	<1	0.48J	10.2 ^{b,c}
0521	1/16/2002	1.4	1.5	<1	<1	<1	<1	<1	0.6J	10.1 ^{b,c}
0521	4/12/2002	0.4J	0.82J	<1	<1	<1	<1	2.4	0.37J	2.4 ^c
0522	4/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0522	7/13/2001	<1	<1	<1	<1	<1	<1	<1	3J	ND
0522	10/10/2001	<1	<1	<1	<1	<1	<1	<1	0.96J	ND
0522	1/14/2002	0.79J	<1	<1	<1	<1	<1	<1	<5	ND
0522	4/12/2002	<1	<1	<1	<1	<1	<1	<1	0.51J	ND
0523	4/12/2001	0.13J	2.2	<1	<1	<1	0.65J	<1	0.6J	2.2 ^b
0523	10/10/2001	0.55J	2.5	<1	<1	1.4	0.35J	<1	4.9J	3.9
0523	1/14/2002	0.55J	1.1	<1	<1	<1	<1	<1	0.48J	1.1
0523	4/12/2002	0.15J	1.1	<1	<1	0.49J	<1	<1	<5	1.1 ^c
0524	4/7/2001	<5	170	1.5J	4.3J	93	<5	<5	<25	268.2 ^c
0524	7/11/2001	<5	260	3J	<5	78	<5	<5	6.4J	338
0524	10/6/2001	<10	500	4.1J	3.8J	51	<10	<10	<50	551
0524	1/15/2002	<10	670	8.2	25	320	<10	<10	<50	1,023.2 ^c
0524	4/13/2002	<10	1,800	110	430	490	<10	<10	<50	2,854 ^{b,c}
0525	4/7/2001	<1	5.3	<1	<1	<1	<1	<1	<5	5.3
0525	7/11/2001	<1	4	<1	<1	<1	<1	<1	0.42J	4
0525	10/6/2001	<1	4.2	<1	<1	<1	<1	<1	<5	4.2
0525	1/15/2002	<1	2.5	<1	<1	<1	<1	<1	<5	2.5 ^c
0525	4/13/2002	<1	2.2	<1	<1	<1	<1	<1	0.53J	2.2 ^c
0526	4/7/2001	<1	2.8	1.7	<1	3.3	<1	<1	0.32J	7.8

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
0526	7/11/2001	<1	8.3	4	<1	4	0.16J	<1	<5	16.3
0526	10/3/2001	<1	5.8	3.4	<1	2.8	<1	<1	5.5	17.5
0526	1/16/2002	<1	13	7.9	<1	8.1	0.17J	<1	0.65J	29
0526	4/13/2002	<1	14	4.8	<1	3.4	<1	<1	<5	22.2 ^b
0527	4/9/2001	<1	<1	<1	<1	<1	<1	<1	0.39J	ND
0527	10/7/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0527	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.4J	ND
0528	4/12/2001	<1	<1	<1	<1	<1	<1	<1	0.75J	ND
0528	7/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0528	10/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0528	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.37J	ND
RW01	4/12/2001	2,200	1,500	54	<50	260	<50	<50	<250	4,014
RW01	7/13/2001	10,000	5,600	<250	<250	<250	<250	<250	680J	15,600
RW01	10/22/2001	5,900	4,000	<250	31J	510	<250	<250	<1,200	10,410
RW01	1/14/2002	9,600	5,200	27J	24J	1,100	<100	<100	<500	15,900 ^c
RW01	4/11/2002	9,000	7,200	<250	<250	400	<250	<250	<1,200	16,600
RW02	4/12/2001	910	730	50	<50	<50	<50	<50	<250	1,690
RW02	7/13/2001	1,200	790	74	9.8J	<25	<25	<25	79J	2,064 ^c
RW02	10/10/2001	780	640	65	15J	<25	<25	<25	18J	1,485
RW02	1/14/2002	890	800	50	7.8J	97	<25	<25	<120	1,837
RW02	4/11/2002	750	840	55	18	67	<10	<10	6.7J	1,730
S29C	4/10/2001	<1	0.3J	3.1	<1	4.4	2.7	5.9	0.44J	16.1 ^b
S29C	1/11/2002	<1	1.1	7.7	<1	120	4.1	<1	2.1J	132.9 ^b
S29C	4/16/2002	<2.5	0.32J	3.6	<2.5	100	1.2J	1.5J	<12	103.6 ^{b,c}
S30B	4/11/2001	20,000	15,000	7,300	790J	420J	<500	<500	800J	42,300
S30B	1/11/2002	11,000	9,400	240J	<250	<250	<250	<250	<1,200	20,400
S30B	4/16/2002	3,800	10,000	150J	<250	<250	<250	<250	<1,200	13,800
S31B	4/10/2001	1.2	0.96J	0.34J	<1	1.4	<1	<1	0.41J	4.1 ^c
S31B	1/11/2002	1.1	1.3	<1	<1	<1	<1	<1	2.6J	2.4 ^c
S31B	4/16/2002	0.27J	0.85J	<1	<1	<1	<1	<1	<5	ND
S32B	4/10/2001	<5	44	12	31	91	120	6.5	1.3J	524.5 ^c
S32B	1/11/2002	0.36J	16	2.2	4	9.8	16	<1	1.6J	62 ^c
S32B	4/16/2002	<1	18	1	2.6	5	10	<1	<5	79.6 ^{b,c}
S33C	4/9/2001	6.9	360	21	9.5	310	51	1.8J	1.1J	767.2 ^{b,c}
S33C	1/11/2002	7.5J	340	22	8.5J	580	58	<10	30J	1,000 ^b
S33C	4/16/2002	1.8J	230	6.6	3.5J	520	32	<5	<25	812.8 ^{b,c}
S35B	4/9/2001	35,000	71,000	10,000	430J	13,000	<2,500	<2,500	<12,000	129,000
S35B	1/11/2002	44,000	76,000	9,500	320J	19,000	<1,000	<1,000	<5,000	148,500
S35B	4/15/2002	47,000	110,000	7,800	<2,500	11,000	<2,500	<2,500	<12,000	175,800 ^c
S36B	4/10/2001	<1	0.34J	0.32J	<1	<1	<1	0.37J	<5	ND
S36B	1/11/2002	<1	<1	<1	<1	<1	<1	<1	1.6J	ND
S36B	4/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S37B	4/10/2001	1.4	71	2	0.7J	80	1.2	<1	0.53J	165.3 ^c
S37B	1/11/2002	0.43J	53	1.2	<1	46	0.47J	8.8	1.2J	109 ^b
S37B	4/16/2002	<5	220	1.2J	<5	160	<5	<5	<25	386.4 ^c

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
S54D	4/9/2001	9,500	31,000	210J	320J	4,600	<500	<500	<2,500	45,100
S54D	1/12/2002	15,000	42,000	250J	420J	<500	<500	<500	<2,500	57,000
S54D	4/15/2002	9,900	43,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	52,900 ^b
S55B	4/9/2001	<50	2,000	<50	<50	1,700	<50	<50	<250	3,700 ^b
S55B	1/12/2002	<50	820	<50	<50	5,100	<50	<50	<250	5,920 ^b
S55B	4/15/2002	<100	1,800	<100	<100	11,000	<100	<100	<500	12,800 ^b
S55C	4/9/2001	<250	7,500	<250	<250	2,400	<250	<250	<1,200	9,900
S55C	1/12/2002	<100	6,600	53J	<100	2,600	<100	<100	<500	9,200 ^c
S55C	4/15/2002	<100	9,400	16J	<100	3,000	<100	<100	<500	12,400
S56B	4/9/2001	<1	<1	0.22J	<1	<1	<1	<1	0.36J	ND
S56B	1/12/2002	<1	<1	<1	<1	<1	<1	<1	1.3J	ND
S56B	4/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S56C	4/9/2001	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<12	ND
S56C	1/12/2002	<1	<1	<1	<1	<1	<1	<1	1.2J	ND
S56C	4/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S56D	4/9/2001	0.46J	0.54J	<1	<1	<1	<1	<1	0.39J	ND
S56D	1/12/2002	1.3	5.2	0.25J	<1	1.4	<1	<1	1.1J	7.9
S56D	4/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
S57B	4/9/2001	<1	0.12J	<1	<1	<1	<1	<1	<5	ND
S57B	1/12/2002	27	23	<1	1.6	10	<1	<1	1J	61.6
S57B	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.65J	ND
S57C	4/9/2001	16,000	26,000	<1,000	1,300	16,000	<1,000	<1,000	<5,000	59,300
S57C	1/12/2002	850J	26,000	460J	1,300	41,000	<1,000	<1,000	660J	68,300
S57C	4/15/2002	21,000	23,000	<1,000	370J	16,000	<1,000	<1,000	530J	60,000
S57D	4/9/2001	5.6	98	1.1J	3.6J	210	<5	<5	<25	313.6 ^c
S57D	1/12/2002	3J	100	1.6J	5.8	160	<5	<5	5.2J	265.8
S57D	4/15/2002	7.6	240	1.1J	3.5J	580	<5	<5	<25	827.6 ^b
S59B	4/10/2001	<1	1.9	<1	<1	2.9	3.7	<1	0.53J	8.5
S59B	1/10/2002	<1	0.44J	<1	<1	<1	1.1	<1	<5	1.1
S59B	4/12/2002	<1	0.5J	<1	<1	3.7	0.99J	<1	<5	3.7
S59C	4/10/2001	1.5	5.3	<1	<1	5.8	<1	0.49J	0.56J	12.6 ^c
S59C	1/10/2002	<1	7.4	<1	<1	12	<1	<1	<5	22.2 ^c
S59C	4/12/2002	<1	5.8	<1	<1	5.4	<1	<1	<5	12.3 ^{b,c}
S59D	4/10/2001	0.18J	0.15J	<1	<1	<1	<1	<1	0.56J	ND
S59D	1/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S59D	4/12/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S60B	4/10/2001	0.64J	7.5	<1	1.3	2.2	12	<1	0.58J	23
S60B	1/10/2002	<1	3.4	<1	0.54J	<1	6.4	0.24J	<5	9.8 ^b
S60B	4/12/2002	<1	5.9	<1	0.63J	<1	7	<1	<5	12.9 ^b
S60C	4/10/2001	1.6	0.76J	0.19J	<1	<1	<1	<1	0.6J	1.6
S60C	1/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
S60C	4/12/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
S60D	4/10/2001	1	0.86J	0.32J	<1	<1	<1	<1	0.56J	1
S60D	1/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S60D	4/12/2002	<1	<1	<1	<1	<1	<1	<1	0.43J	ND

Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
S67B	1/10/2002	<10	51	6.1J	0.34J	470	94	<10	17J	636 ^c
S67B	4/12/2002	<10	41	1.9J	<10	550	110	<10	<50	701
S67C	1/10/2002	<10	270	47	<10	550	62	<10	18J	929
S67C	4/12/2002	<10	440	64	1.4J	240	23	<10	<50	767
S67D	1/10/2002	0.13J	110	27	1.4	57	4.6	<1	1.8J	200
S67D	4/12/2002	<2.5	100	<2.5	<2.5	69	<2.5	<2.5	<12	169
S68B	4/11/2002	<1	<1	<1	<1	<1	<1	<1	0.4J	ND
S68C	4/11/2002	<1	1.6	<1	<1	1.7	<1	<1	<5	3.3
S68D	4/11/2002	<1	50	<1	<1	62	<1	14	0.34J	126
S69B	4/10/2002	<1	<1	<1	<1	<1	<1	<1	0.49J	ND
S69C	4/10/2002	<1	1.1	<1	<1	<1	<1	<1	0.42J	1.1
S69D	4/10/2002	<1	<1	<1	<1	<1	<1	<1	0.87J	ND
S70B	4/10/2002	<1	30	0.36J	<1	16	<1	<1	0.31J	46
S70C	4/10/2002	<1	26	5.4	<1	6	6.1	<1	<5	43.5
S70D	4/10/2002	<1	7	1.2	<1	1.2	0.48J	<1	0.88J	9.4
S71B	4/11/2002	<1	<1	<1	<1	<1	<1	<1	0.64J	ND
S71C	4/11/2002	<1	55	17	0.45J	28	2.9	<1	1.1J	102.9
S71D	4/11/2002	<1	0.93J	<1	<1	<1	<1	<1	0.5J	ND
S72B	4/9/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S72C	4/10/2002	<1	<1	<1	<1	<1	0.71J	<1	0.47J	ND
S72D	4/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S73B	4/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
S73C	4/10/2002	<1	46	18	<1	29	4.2	<1	0.77J	97.2
S73D	4/10/2002	<1	<1	<1	<1	<1	<1	<1	0.86J	ND
TE03	4/12/2001	<1	<1	<1	<1	5.1	<1	<1	1.8J	5.1
TE03	10/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
TE03	1/16/2002	<1	<1	<1	<1	<1	<1	<1	0.87J	ND
TE03	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
PIN15		Northeast Site								
0506	4/4/2001	<1	<1	<1	<1	<1	<1	<1	2.1J	ND
0506	10/3/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^c
0506	4/17/2002	<1	0.14J	<1	<1	<1	0.29J	<1	<5	ND
0507	4/4/2001	<1	<1	<1	<1	<1	<1	<1	1.7J	ND
0507	10/3/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0507	4/17/2002	<1	0.15J	<1	<1	0.24J	0.36J	<1	0.37J	ND
0510	4/11/2001	<1	<1	<1	<1	0.21J	<1	<1	1.1J	ND
0510	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^c
0513	4/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0513	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0514	4/10/2001	<10	<10	<10	<10	100	<10	<10	<50	637 ^b
0514	7/12/2001	<1	<1	<1	<1	28	<1	<1	0.3J	67.2 ^{b,c}
0514	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	1 ^b
0514	1/8/2002	<1	<1	<1	<1	3	0.17J	<1	0.32J	13.8 ^b
0514	4/17/2002	<1	<1	<1	<1	<1	<1	<1	1.4J	ND
0515	4/10/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
0515	7/12/2001	<1	<1	<1	<1	<1	<1	<1	0.86J	ND
0515	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0515	1/8/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0515	4/17/2002	<1	<1	<1	<1	<1	<1	<1	1J	ND
0516	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0516	7/12/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND
0516	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0516	1/8/2002	<1	<1	<1	<1	<1	<1	<1	1.3J	ND
0516	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0518	4/6/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND
0518	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0520	4/4/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND
0520	7/14/2001	<1	<1	<1	<1	<1	<1	<1	1.4J	ND
0520	10/3/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0520	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0523	4/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0523	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0530	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0530	7/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0530	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0530	1/8/2002	<1	<1	<1	<1	<1	<1	<1	1.5J	ND
0530	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0531	4/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0531	4/19/2002	<1	<1	<1	<1	<1	<1	<1	0.76J	ND
0533	4/12/2001	5,200	16,000	<250	42J	1,700	<250	<250	610J	22,900 ^{b,c}
0533	4/19/2002	7,800	16,000	<250	67J	560	<250	<250	140J	24,360
0534	4/4/2001	<1	<1	<1	<1	<1	<1	<1	0.55J	ND
0534	7/14/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0534	10/3/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0534	4/17/2002	<1	0.19J	<1	<1	<1	<1	<1	<5	ND
0535	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	2 ^b
0535	7/11/2001	0.12J	<1	<1	<1	<1	<1	<1	0.88J	1.6 ^b
0535	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	1.2 ^b
0535	1/8/2002	0.13J	0.73J	<1	<1	<1	<1	<1	<5	2.5 ^b
0535	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	2 ^b
0536	4/11/2001	670	16,000	400	52J	11,000	<250	<250	410J	28,070 ^b
0536	7/13/2001	33,000	40,000	880J	<1,000	<1,000	<1,000	<1,000	<5,000	73,000 ^c
0536	10/9/2001	120,000	54,000	<2,500	<2,500	<2,500	<2,500	<2,500	<12,000	174,000
0536	1/9/2002	110,000	32,000	<2,500	<2,500	1,800J	<2,500	<2,500	<12,000	142,000
0536	4/19/2002	110,000	15,000	920J	<1,000	560J	<1,000	<1,000	<5,000	125,000
0537	4/11/2001	25J	20,000	<250	86J	3,600	<250	<250	300J	23,600 ^b
0537	7/13/2001	52J	11,000	<250	<250	1,800	<250	<250	<1,200	12,800
0537	10/5/2001	<250	11,000	<250	<250	<250	<250	<250	<1,200	11,000 ^b
0537	1/10/2002	29J	7,800	67J	<250	2,100	<250	<250	<250	9,900 ^b
0537	4/18/2002	21J	3,600	<50	<50	1,800	<50	<50	16J	5,400

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
0538	4/6/2001	<2,500	70,000	<2,500	<2,500	62,000	<2,500	<2,500	<12,000	137,300 ^b
0538	1/10/2002	<500	11,000	58J	<500	40,000	<500	<500	<2,500	53,000 ^b
0538	4/18/2002	<250	2,500	<250	<250	24,000	<250	<250	<1,200	27,050 ^b
0557	4/6/2001	<1	<1	<1	<1	6.5	<1	<1	0.79J	6.5 ^{b,c}
0557	7/13/2001	<1	<1	<1	<1	4.1	<1	<1	0.34J	5.3 ^{b,c}
0557	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^c
0557	4/18/2002	<1	<1	<1	<1	3	<1	2.1	<5	5.1
0558	4/11/2001	<500	180J	<500	<500	11,000	<500	<500	490J	11,000 ^b
0558	7/13/2001	<250	<250	<250	<250	9,800	<250	<250	<1,200	9,800 ^b
0558	10/4/2001	<250	<250	<250	<250	27,000	<250	<250	<1,200	27,000
0558	1/10/2002	<50	<50	<50	<50	4,600	<50	<50	<250	4,600 ^b
0558	4/16/2002	<250	<250	<250	<250	1,500	<250	<250	340J	1,500
0559	4/11/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND ^b
0559	7/13/2001	<1	<1	<1	<1	<1	<1	<1	2.8J	ND ^b
0559	10/4/2001	<1	<1	<1	<1	<1	<1	<1	4.5J	ND ^b
0559	1/14/2002	1.4	0.55J	<1	<1	<1	<1	<1	1.3J	1.4 ^b
0559	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0560	10/10/2001	<1	0.24J	<1	<1	<1	<1	<1	1.8J	ND
0560	1/11/2002	<1	<1	<1	<1	<1	<1	<1	3.1J	2.5 ^c
0560	4/19/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0561	10/10/2001	<1	<1	<1	<1	<1	<1	<1	1.8J	ND
0561	1/11/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0561	4/19/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0562	10/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0562	1/11/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^c
0562	4/18/2002	<1	<1	<1	<1	<1	<1	1.2	<5	3.6 ^c
0563	10/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^{b,c}
0563	1/11/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0563	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0564	10/10/2001	<1	<1	<1	<1	<1	<1	<1	1.1J	ND ^b
0564	1/11/2002	<1	<1	<1	<1	<1	<1	<1	4.4J	ND ^b
0564	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0565	10/10/2001	<1	<1	<1	<1	<1	<1	<1	2.4J	ND ^b
0565	1/11/2002	6.9	5.1	<1	<1	3.6	<1	<1	3.5J	15.6 ^b
0565	4/18/2002	<1	<1	<1	<1	<1	<1	<1	0.44J	ND
0566	10/10/2001	<1	<1	<1	<1	<1	<1	<1	5.2	8.6 ^b
0566	1/11/2002	<1	<1	<1	<1	<1	<1	<1	<5	4.8 ^b
0566	4/19/2002	<1	<1	<1	<1	<1	<1	<1	<5	8.8 ^b
0567	10/10/2001	2.9	9.6	2.8	0.13J	1.6	<1	<1	1.1J	16.9 ^b
0567	1/11/2002	0.42J	28	9.7	0.26J	5	<1	<1	<5	42.7 ^b
0567	4/19/2002	0.24J	16	5.7	0.15J	2.5	<1	<1	<5	24.2
M03D	4/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	4.3 ^{b,c}
M03D	7/13/2001	<1	<1	<1	<1	4.9	<1	<1	0.55J	7.9 ^b
M03D	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	2.2 ^b
M03D	4/18/2002	<1	<1	<1	<1	0.61J	<1	<1	<5	ND

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
M03S	4/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
M03S	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
M12D	4/4/2001	<1	<1	<1	<1	<1	<1	<1	1.6J	ND
M12D	7/14/2001	<1	<1	<1	<1	<1	<1	<1	0.91J	ND
M12D	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M12D	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
M12S	4/4/2001	<1	<1	<1	<1	<1	<1	<1	1.6J	ND
M12S	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
M14D	4/5/2001	<1	<1	<1	0.2J	0.54J	<1	<1	0.39J	ND
M14D	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M14D	4/17/2002	<1	<1	<1	<1	0.91J	<1	<1	<5	ND
M14S	4/5/2001	<1	<1	<1	<1	0.33J	<1	<1	<5	ND
M14S	4/17/2002	<1	<1	<1	<1	<1	<1	0.49J	<5	2 ^c
M16D	4/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M16D	7/13/2001	<1	<1	<1	<1	1.2	<1	<1	0.74J	1.2 ^c
M16D	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M16D	4/18/2002	<1	<1	<1	<1	<1	<1	0.26J	<5	4.8 ^c
M16S	4/6/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M16S	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M16S	4/18/2002	<1	<1	<1	<1	<1	<1	1.1	<5	3.2 ^c
M17D	4/12/2001	1,200J	130,000	<5,000	<5,000	19,000	<5,000	<5,000	70,000	262,000 ^b
M17D	4/18/2002	21,000	140,000	<2,500	<2,500	3,800	<2,500	<2,500	65,000	291,800 ^b
M17S	4/12/2001	<1	0.22J	<1	<1	<1	<1	<1	0.16J	7.7 ^b
M17S	4/18/2002	10	7.1	<1	<1	0.61J	<1	<1	1.2J	45.1 ^b
M24D	4/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M24D	4/18/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
M27D	4/3/2001	<1	<1	<1	<1	<1	<1	<1	0.74J	21.7 ^b
M27D	7/10/2001	<1	<1	<1	<1	<1	<1	<1	1.8J	23.2 ^{b,c}
M27D	10/8/2001	<1	<1	<1	<1	<1	<1	<1	0.59J	20.2 ^b
M27D	1/8/2002	<1	<1	<1	<1	<1	<1	<1	1.3J	11.2 ^b
M27D	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	25.2 ^b
M27S	4/4/2001	<1	<1	<1	<1	<1	<1	<1	1.4J	ND
M27S	7/10/2001	<1	<1	<1	<1	<1	<1	<1	1.4J	ND
M27S	10/8/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M27S	1/8/2002	<1	<1	<1	<1	<1	<1	<1	0.48J	ND
M27S	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
M29D	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	4.1 ^b
M29D	7/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	1.6 ^b
M29D	10/6/2001	<1	<1	<1	<1	<1	<1	<1	0.55J	ND
M29D	1/9/2002	<1	<1	<1	<1	<1	<1	<1	<5	1 ^{b,c}
M29D	4/17/2002	<1	<1	<1	<1	<1	<1	<1	0.9J	ND ^b
M29S	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M29S	7/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M29S	10/6/2001	<1	<1	<1	<1	<1	<1	<1	0.56J	ND
M29S	1/9/2002	<1	<1	<1	<1	<1	<1	<1	0.39J	ND

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
M29S	4/17/2002	<1	<1	<1	<1	<1	<1	<1	1.3J	ND
M30D	4/10/2001	<1	<1	<1	<1	4.4	<1	<1	<5	4.4 ^b
M30D	4/18/2002	<1	<1	<1	<1	2.2	<1	<1	0.87J	5.3 ^c
M30S	4/6/2001	<1	<1	<1	<1	<1	<1	<1	0.87J	ND
M30S	4/18/2002	<2.5	3.8	<2.5	<2.5	41	<2.5	<2.5	<12	44.8
M31D	4/12/2001	<50	1,700	<50	<50	2,300	<50	<50	<250	4,000 ^b
M31D	7/13/2001	<50	1,800	<50	<50	1,200	<50	<50	27J	3,000 ^b
M31D	10/5/2001	<2.5	190	<2.5	<2.5	180	<2.5	<2.5	<12	370 ^b
M31D	1/10/2002	<50	3,400	<50	<50	3,200	<50	<50	63J	6,600 ^b
M31D	4/19/2002	<5	180	<5	<5	520	<5	<5	<25	711 ^b
M31S	4/12/2001	<10	260	2J	<10	420	<10	<10	9.4J	680 ^b
M31S	7/13/2001	<10	47	<10	<10	140	<10	<10	<50	187 ^b
M31S	10/5/2001	21	10	<1	<1	65	<1	<1	<5	98 ^b
M31S	1/10/2002	<1	0.75J	<1	<1	25	<1	<1	<5	28 ^b
M31S	4/19/2002	<1	0.32J	<1	<1	8.7	<1	<1	<5	11.9 ^b
M32D	4/11/2001	<1	<1	<1	<1	0.21J	<1	<1	1.8J	ND
M32D	7/12/2001	<1	<1	<1	<1	<1	<1	<1	0.3J	ND ^b
M32D	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
M32D	1/8/2002	<1	<1	<1	<1	<1	<1	<1	0.67J	ND ^b
M32D	4/17/2002	<1	<1	2.2	<1	<1	0.13J	<1	<5	7.7 ^{b,c}
M32S	4/11/2001	<1	0.23J	<1	<1	0.2J	<1	<1	2.2J	ND
M32S	7/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M32S	10/4/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M32S	1/8/2002	0.35J	2	<1	<1	0.55J	<1	<1	<5	2
M32S	4/17/2002	<1	<1	<1	<1	<1	<1	<1	1.2J	ND
M33D	4/5/2001	<1	<1	<1	<1	<1	<1	<1	0.44J	ND
M33D	10/5/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
M33D	4/18/2002	<1	<1	<1	<1	<1	0.14J	<1	0.35J	ND
M34D	4/12/2001	<500	430J	<500	<500	22,000	<500	<500	65J	22,000 ^b
M34D	7/13/2001	<500	1,900	<500	<500	19,000	<500	<500	520J	20,900 ^b
M34D	10/8/2001	<250	65J	<250	<250	5,800	<250	<250	<1,200	5,800 ^b
M34D	1/10/2002	<250	9,700	68J	<250	15,000	<250	<250	<1,200	24,700 ^b
M34D	4/19/2002	<500	15,000	<500	<500	14,000	<500	<500	1,000J	32,400 ^b
M35D	4/12/2001	250,000	150,000	<50,000	<50,000	<50,000	<50,000	<50,000	2,500,000	2,995,000 ^{b,c}
M35D	4/19/2002	440,000	310,000	<100,000	<100,000	<100,000	<100,000	<100,000	9,000,000	9,920,000 ^b
M36D	4/12/2001	<500	8,000	<500	<500	22,000	<500	<500	960J	42,000 ^{b,c}
M36D	4/19/2002	<250	11,000	<250	<250	15,000	<250	<250	<1,200	51,000 ^b
M37D	4/12/2001	<500	1,600	<500	<500	18,000	<500	<500	870J	28,000 ^b
M37D	4/19/2002	<100	130	<100	<100	5,500	<100	<100	<500	8,330 ^b
RW06	7/18/2001	34,000	40,000	<5,000	<5,000	<5,000	<5,000	<5,000	330,000	432,200 ^{b,c}
RW06	1/11/2002	72,000	61,000	1,100J	<5,000	22,000	<5,000	<5,000	520,000	718,000 ^b
RW06	4/17/2002	24,000J	42,000	<25,000	<25,000	<25,000	<25,000	<25,000	570,000	706,000 ^b
RW11	4/11/2001	<1,000	8,500	<1,000	<1,000	9,000	<1,000	<1,000	1,000J	26,700 ^b
RW11	7/23/2001	<50	<50	<50	<50	1,900	<50	<50	<250	3,500 ^b
RW11	10/22/2001	1.9J	560	<10	<10	34	<10	<10	3.1J	612 ^{b,c}

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
RW11	1/10/2002	<250	2,700	<250	<250	6,600	<250	<250	290J	12,300 ^b
RW11	4/17/2002	<50	100	<50	<50	880	<50	<50	<250	2,680 ^b
RW12	4/11/2001	320J	9,200	<500	<500	7,600	<500	<500	600J	18,400 ^b
RW12	7/13/2001	470J	13,000	<500	<500	11,000	<500	<500	1,300J	26,700 ^b
RW12	10/8/2001	730	12,000	<500	<500	5,600	<500	<500	200J	21,130 ^b
RW12	1/10/2002	250	7,200	<250	<250	9,300	<250	<250	<1,200	18,050 ^b
RW12	4/17/2002	59J	7,800	<250	<250	6,200	<250	<250	460J	16,300 ^b
RW13	4/9/2001	<250	410	<250	<250	400	<250	<250	3,700	5,090 ^b
RW13	7/12/2001	<50	170	<50	<50	170	<50	<50	2,800	3,400 ^b
RW13	10/8/2001	1,000	2,200	7J	<50	660	<50	<50	59J	4,020 ^b
RW13	1/10/2002	0.62J	120	<2.5	<2.5	59	<2.5	<2.5	110	393.3 ^b
RW13	4/17/2002	<25	110	<25	<25	<25	<25	<25	910	1,140 ^b
RW14	4/9/2001	260	5,300	<250	<250	6,100	<250	<250	9,000	22,060 ^{b,c}
RW14	7/12/2001	120J	2,800	<250	<250	2,000	<250	<250	5,400	11,640 ^{b,c}
RW14	10/8/2001	26	130	0.86J	<5	400	<5	<5	3.5J	573 ^b
RW14	1/11/2002	430	3,000	<50	6.4J	4,900	<50	<50	2,100	11,042 ^b
RW14	4/17/2002	180	3,000	18J	<50	4,900	<50	<50	730	9,120 ^b
RW15	4/9/2001	3,500	6,000	120	43J	3,200	<100	<100	330J	12,820 ^b
RW15	7/12/2001	3,200	4,300	<100	<100	980	<100	<100	240J	8,480 ^b
RW15	10/8/2001	4,200	4,900	12J	<100	1,100	<100	<100	130J	10,200 ^b
RW15	1/11/2002	2,700	2,300	38	12J	990	<25	<25	29J	6,028 ^b
RW15	4/17/2002	1,800	1,300	<25	<25	590	<25	<25	<120	3,690
RW16	4/9/2001	<50	270	15J	<50	3,000	<50	<50	<250	3,270 ^b
RW16	7/23/2001	<50	680	7J	<50	2,200	<50	<50	16J	2,880 ^b
RW16	10/22/2001	<50	560	<50	<50	1,100	<50	<50	<250	1,660
RW16	1/10/2002	<50	680	<50	<50	1,600	<50	<50	<250	2,280
RW16	4/17/2002	<50	27J	<50	<50	1,200	<50	<50	<250	1,200
RW17	4/9/2001	290J	80,000	<1,000	<1,000	59,000	<1,000	<1,000	<5,000	147,100 ^b
RW17	7/23/2001	<1,000	82,000	<1,000	110J	40,000	<1,000	<1,000	560J	125,900 ^b
RW17	10/22/2001	<1,000	76,000	<1,000	<1,000	25,000	<1,000	<1,000	<5,000	104,100 ^b
RW17	1/10/2002	<1,000	61,000	<1,000	<1,000	27,000	<1,000	<1,000	<5,000	89,700 ^b
RW17	4/17/2002	<1	110	<1	<1	51	<1	<1	<5	164.4 ^b
PIN18		Wastewater Neutralization Area								
0500	4/11/2001	0.47J	3.3	2.1	<1	<1	<1	<1	0.56J	5.4
0500	4/16/2002	0.25J	1	0.4J	<1	<1	<1	<1	<5	1
0501	4/11/2001	<1	0.29J	<1	<1	<1	<1	<1	0.85J	ND ^b
0501	4/16/2002	<1	<1	<1	<1	<1	<1	<1	0.39J	ND
0502	4/11/2001	<1	<1	<1	<1	<1	<1	<1	0.34J	ND
0502	4/16/2002	<1	<1	<1	<1	<1	<1	<1	0.85J	ND
0503	4/7/2001	<1	0.2J	<1	<1	<1	<1	<1	1.1J	ND
0503	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.78J	ND
0504	4/12/2001	<1	<1	<1	<1	<1	<1	<1	0.83J	ND
0504	4/16/2002	<1	<1	<1	<1	<1	<1	<1	0.43J	ND ^c
0505	4/7/2001	0.2J	1.1	<1	<1	<1	0.66J	<1	0.78J	1.1
0505	4/13/2002	0.45J	1.8	<1	<1	<1	0.55J	<1	<5	1.8

Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
0506	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.76J	ND
0506	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0507	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.61J	ND
0507	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.62J	ND
0508	4/12/2001	<1	<1	<1	<1	<1	<1	<1	0.77J	ND
0508	4/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0509	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.55J	ND
0509	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.48J	ND
0510	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.78J	ND
0511	4/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0511	4/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0512	4/10/2001	<1	<1	<1	<1	0.48J	<1	<1	0.38J	ND
0512	4/16/2002	<1	<1	<1	<1	<1	<1	<1	0.34J	ND
0513	4/10/2001	<1	0.34J	<1	<1	1.3	<1	<1	<5	1.3
0513	4/16/2002	<1	0.25J	<1	<1	<1	<1	<1	0.56J	ND
0514	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.53J	ND
0514	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0515	4/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0516	4/12/2001	<1	<1	<1	<1	<1	<1	<1	0.34J	ND
0516	4/15/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0517	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.5J	ND
0517	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0518	4/7/2001	<1	<1	<1	<1	<1	<1	<1	0.53J	ND
0518	4/13/2002	<1	<1	<1	<1	<1	<1	<1	0.31J	ND
0519	4/7/2001	<1	<1	<1	<1	2.6	<1	<1	0.55J	3.8 ^b
0519	4/13/2002	<1	<1	<1	<1	6.7	<1	<1	<5	6.7 ^{b,c}
0520	4/11/2001	<1	<1	<1	<1	<1	<1	<1	0.4J	ND
0520	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.3J	ND
0521	4/11/2001	<1	0.86J	<1	<1	<1	<1	<1	1.5J	ND
0521	4/15/2002	<1	1.1	<1	<1	<1	<1	<1	<5	1.1
0522	4/11/2001	<1	<1	<1	<1	<1	<1	<1	0.5J	ND
0522	4/15/2002	<1	0.51J	<1	<1	<1	<1	<1	0.32J	ND
0523	4/15/2002	<1	<1	<1	<1	<1	<1	<1	0.49J	ND ^c
0524	4/11/2001	<1	0.28J	<1	<1	<1	<1	<1	0.33J	ND
0524	4/15/2002	<1	0.29J	<1	<1	<1	<1	<1	0.63J	ND ^c
0525	4/16/2002	<1	<1	<1	<1	<1	<1	<1	0.48J	ND ^c
0526	4/12/2001	<1	<1	<1	<1	<1	<1	<1	0.54J	3.3 ^b
0526	4/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	3.7 ^b
RW02	4/11/2001	<1	0.24J	<1	<1	<1	<1	<1	0.52J	ND
RW02	7/12/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
RW02	10/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
RW02	1/10/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
RW02	4/16/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
RW03	4/11/2001	<1	0.66J	<1	<1	<1	<1	<1	0.86J	ND
RW03	7/12/2001	<1	0.32J	<1	<1	<1	<1	<1	0.43J	ND

*Table 9 (continued). VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl chloride	1,1-DCA	Chloroethane	Methylene chloride	Total VOCs ^a
RW03	10/11/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
RW03	1/10/2002	<1	0.49J	<1	<1	<1	<1	<1	0.41J	ND ^b
RW03	4/15/2002	0.11J	0.44J	<1	<1	<1	<1	<1	<5	ND
PIN21		Perimeter Monitoring Wells								
0500	4/11/2001	<1	<1	<1	<1	<1	<1	<1	0.35J	ND
0500	1/9/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0500	4/9/2002	<1	<1	<1	<1	<1	<1	<1	1.3J	ND
0501	4/11/2001	<1	1.1	<1	<1	<1	<1	<1	1.8J	1.1
0501	10/3/2001	<1	1.6	0.12J	<1	<1	<1	<1	1.5J	1.6
0501	1/9/2002	<1	1.8	0.14J	<1	<1	<1	<1	0.54J	1.8
0501	4/9/2002	<1	1.5	<1	<1	<1	<1	<1	<5	1.5
0502	4/11/2001	<1	<1	<1	<1	<1	<1	<1	1.6J	ND
0502	1/9/2002	<1	<1	<1	<1	<1	<1	<1	0.82J	ND
0502	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0503	4/11/2001	<1	<1	<1	<1	<1	<1	<1	1.8J	ND
0503	7/10/2001	<1	<1	<1	<1	<1	<1	<1	0.41J	ND
0503	10/3/2001	<1	<1	<1	<1	<1	<1	<1	1.2J	ND
0503	1/9/2002	<1	<1	<1	<1	<1	<1	<1	1.4J	ND
0503	4/13/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0504	4/12/2001	<1	<1	<1	<1	<1	<1	<1	2.3J	ND
0504	1/9/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0504	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND ^b
0505	4/12/2001	<1	<1	<1	<1	<1	<1	<1	2.4J	ND
0505	7/10/2001	<1	<1	<1	<1	<1	<1	<1	<5	ND
0505	10/3/2001	<1	0.14J	<1	<1	0.31J	0.33J	<1	2.5J	ND
0505	1/9/2002	<1	<1	<1	<1	<1	0.27J	<1	<5	ND
0505	4/17/2002	<1	<1	<1	<1	<1	<1	<1	<5	ND
0512	4/11/2001	<1	1.2	<1	<1	2.6	<1	<1	2J	3.8
0512	7/10/2001	<1	1.5	<1	<1	3.1	<1	<1	0.45J	4.6
0512	10/3/2001	<1	2	0.18J	<1	4.1	<1	<1	0.77J	6.1
0512	1/9/2002	<1	2.8	0.22J	<1	8.6	<1	<1	<5	11.4 ^c
0512	4/16/2002	<1	2.7	<1	<1	3.7	<1	<1	<5	6.4 ^c

^a "J" values are not included in the "Total VOCs" value.

^b See the "BTEX Table" for additional analytical results.

^c See the "Additional VOCs Table" for additional analytical results.

ND = Not detected.

J = Estimated value, result is between the reporting limit and the method detection limit.

*Table 10. BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
PIN05		Trench Site				
0500	4/10/2001	<1	<1	<1	ND	ND
0500	4/10/2002	<1	<1	<1	ND	ND
PIN06		Old Drum Storage Site				
0500	4/12/2001	<1	<1	<1	ND	ND
0500	1/16/2002	<1	<1	<1	ND	ND
0500	4/12/2002	<1	<1	<1	ND	ND
0501	4/12/2001	<1	<1	<1	ND	ND
0501	1/16/2002	<1	<1	<1	ND	ND
0501	4/12/2002	<1	<1	<1	ND	ND
PIN09		Incinerator Site				
0500	4/12/2001	<1	<1	<1	ND	ND
0500	1/15/2002	<1	<1	<1	ND	ND
0500	4/12/2002	<1	<1	<1	ND	ND
PIN10		Incinerator Ditch				
0500	4/12/2001	<1	<1	<1	ND	ND
0500	1/14/2002	<1	<1	<1	ND	ND
0500	4/12/2002	<1	<1	<1	ND	ND
PIN12		Industrial Drain Leaks Building 100				
0508	4/12/2001	<1	<1	<1	ND	ND
0508	1/16/2002	<1	<1	<1	ND	ND
0508	4/17/2002	<1	<1	<1	ND	ND
0509	4/12/2001	<1	<1	<1	ND	ND
0509	10/10/2001	<1	<1	<1	ND	ND
0509	1/16/2002	<1	<1	<1	ND	ND
0509	4/17/2002	<1	<1	<1	ND	ND
0510	4/12/2001	<1	0.37J	<1	ND	ND
0510	10/10/2001	<1	<1	<1	ND	ND
0510	1/16/2002	<1	<1	<1	ND	ND
0510	4/11/2002	<1	<1	<1	ND	ND
0511	4/12/2001	<1	<1	<1	ND	ND
0511	1/15/2002	<1	<1	<1	ND	ND
0511	4/15/2002	<1	<1	<1	ND	ND
0512	4/12/2001	<1	<1	<1	ND	ND
0512	1/16/2002	<1	<1	<1	ND	ND
0512	4/13/2002	<1	<1	<1	ND	ND
0513	4/7/2001	<1	<1	<1	ND	ND
0513	7/11/2001	<1	<1	<1	ND	ND
0513	10/3/2001	<1	<1	<1	ND	ND
0513	1/9/2002	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0513	4/11/2002	<1	<1	<1	ND	ND
0514	4/12/2001	<2.5	<2.5	<2.5	ND	ND
0514	7/11/2001	<2.5	<2.5	<2.5	ND	ND
0514	10/3/2001	<1	<1	<1	ND	ND
0514	1/9/2002	<1	<1	<1	ND	ND
0514	4/11/2002	<2.5	<2.5	<2.5	ND	ND
0515	4/7/2001	<1	<1	<1	ND	ND
0515	10/7/2001	<1	<1	<1	ND	ND
0515	1/15/2002	<1	<1	<1	0.72J	ND
0515	4/13/2002	<1	<1	<1	0.68J	ND
0516	4/7/2001	<1	<1	<1	ND	ND
0516	1/15/2002	<1	<1	<1	ND	ND
0516	4/13/2002	<1	<1	<1	ND	ND
0517	4/7/2001	<1	<1	<1	ND	ND
0517	1/16/2002	<1	<1	<1	ND	ND
0517	4/13/2002	<1	<1	<1	ND	ND
0518	4/7/2001	<1	<1	<1	ND	ND
0518	7/11/2001	<1	<1	<1	ND	ND
0518	10/7/2001	<1	<1	<1	ND	ND
0518	1/16/2002	<1	<1	<1	ND	ND
0518	4/13/2002	<1	<1	<1	ND	ND
0520	4/12/2001	<10	<10	<10	ND	ND
0520	7/13/2001	<10	1.5J	<10	ND	ND
0520	10/10/2001	<5	0.97J	<5	ND	ND
0520	1/16/2002	<5	1.3J	<5	ND	ND
0520	4/12/2002	<5	<5	<5	ND	ND
0521	4/12/2001	<1	<1	<1	ND	ND
0521	10/10/2001	0.12J	<1	<1	0.16J	ND
0521	1/16/2002	0.15J	<1	<1	ND	ND
0521	4/12/2002	<1	<1	<1	ND	ND
0522	4/12/2001	<1	<1	0.27J	ND	ND
0522	7/13/2001	<1	<1	<1	ND	ND
0522	10/10/2001	<1	<1	<1	ND	ND
0522	1/14/2002	<1	<1	<1	ND	ND
0522	4/12/2002	<1	<1	<1	ND	ND
0523	4/12/2001	<1	<1	<1	0.47J	ND
0523	10/10/2001	<1	<1	<1	ND	ND
0523	1/14/2002	<1	<1	<1	ND	ND
0523	4/12/2002	<1	<1	<1	ND	ND
0524	4/7/2001	<5	<5	<5	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0524	7/11/2001	<5	<5	<5	ND	ND
0524	10/6/2001	<10	<10	<10	ND	ND
0524	1/15/2002	<10	<10	<10	ND	ND
0524	4/13/2002	2.6J	<10	<10	ND	ND
0525	4/7/2001	<1	<1	<1	ND	ND
0525	7/11/2001	<1	<1	<1	ND	ND
0525	10/6/2001	<1	<1	<1	ND	ND
0525	1/15/2002	<1	<1	<1	ND	ND
0525	4/13/2002	<1	<1	<1	ND	ND
0526	4/7/2001	<1	<1	<1	ND	ND
0526	7/11/2001	<1	<1	<1	ND	ND
0526	10/3/2001	<1	<1	<1	ND	ND
0526	1/16/2002	<1	<1	<1	ND	ND
0526	4/13/2002	<1	<1	<1	0.17J	ND
0527	4/9/2001	<1	<1	<1	ND	ND
0527	10/7/2001	<1	<1	<1	ND	ND
0527	4/15/2002	<1	<1	<1	ND	ND
0528	4/12/2001	<1	<1	<1	ND	ND
0528	7/11/2001	<1	<1	<1	ND	ND
0528	10/6/2001	<1	<1	<1	0.15J	ND
0528	4/15/2002	<1	<1	<1	ND	ND
RW01	4/12/2001	<50	<50	<50	ND	ND
RW01	7/13/2001	<250	<250	<250	ND	ND
RW01	10/22/2001	<250	<250	<250	ND	ND
RW01	1/14/2002	<100	<100	<100	ND	ND
RW01	4/11/2002	<250	<250	<250	ND	ND
RW02	4/12/2001	<50	<50	<50	ND	ND
RW02	7/13/2001	<25	<25	<25	ND	ND
RW02	10/10/2001	<25	<25	<25	ND	ND
RW02	1/14/2002	<25	<25	<25	ND	ND
RW02	4/11/2002	<10	<10	<10	ND	ND
S29C	4/10/2001	<1	0.69J	<1	ND	ND
S29C	1/11/2002	0.45J	<1	<1	ND	ND
S29C	4/16/2002	0.45J	<2.5	<2.5	ND	ND
S30B	4/11/2001	<500	<500	<500	ND	ND
S30B	1/11/2002	<250	<250	<250	ND	ND
S30B	4/16/2002	<250	<250	<250	ND	ND
S31B	4/10/2001	<1	<1	<1	ND	ND
S31B	1/11/2002	<1	<1	<1	ND	ND
S31B	4/16/2002	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
S32B	4/10/2001	<5	<5	<5	ND	ND
S32B	1/11/2002	<1	<1	<1	ND	ND
S32B	4/16/2002	0.16J	<1	<1	ND	ND
S33C	4/9/2001	2.1J	<5	<5	1.4J	ND
S33C	1/11/2002	2.1J	<10	<10	ND	ND
S33C	4/16/2002	2.2J	<5	<5	ND	ND
S35B	4/9/2001	<2,500	<2,500	<2,500	ND	ND
S35B	1/11/2002	<1,000	<1,000	<1,000	ND	ND
S35B	4/15/2002	<2,500	<2,500	<2,500	ND	ND
S36B	4/10/2001	<1	<1	<1	ND	ND
S36B	1/11/2002	<1	<1	<1	ND	ND
S36B	4/16/2002	<1	<1	<1	ND	ND
S37B	4/10/2001	<1	<1	<1	ND	ND
S37B	1/11/2002	0.2J	<1	<1	ND	ND
S37B	4/16/2002	<5	<5	<5	ND	ND
S54D	4/9/2001	<500	<500	<500	ND	ND
S54D	1/12/2002	<500	<500	<500	ND	ND
S54D	4/15/2002	230J	<1,000	<1,000	260J	ND
S55B	4/9/2001	<50	15J	<50	ND	ND
S55B	1/12/2002	34J	<50	<50	ND	ND
S55B	4/15/2002	<100	32J	<100	ND	ND
S55C	4/9/2001	<250	<250	<250	ND	ND
S55C	1/12/2002	<100	<100	<100	ND	ND
S55C	4/15/2002	<100	<100	<100	ND	ND
S56B	4/9/2001	<1	<1	<1	ND	ND
S56B	1/12/2002	<1	<1	<1	ND	ND
S56B	4/15/2002	<1	<1	<1	ND	ND
S56C	4/9/2001	<2.5	<2.5	<2.5	ND	ND
S56C	1/12/2002	<1	<1	<1	ND	ND
S56C	4/15/2002	<1	<1	<1	ND	ND
S56D	4/9/2001	<1	<1	<1	ND	ND
S56D	1/12/2002	<1	<1	<1	ND	ND
S56D	4/15/2002	<1	0.26J	<1	ND	ND
S57B	4/9/2001	<1	<1	<1	ND	ND
S57B	1/12/2002	<1	<1	<1	ND	ND
S57B	4/15/2002	<1	<1	<1	ND	ND
S57C	4/9/2001	<1,000	<1,000	<1,000	ND	ND
S57C	1/12/2002	<1,000	<1,000	<1,000	ND	ND
S57C	4/15/2002	<1,000	<1,000	<1,000	ND	ND
S57D	4/9/2001	<5	<5	<5	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
S57D	1/12/2002	<5	<5	<5	ND	ND
S57D	4/15/2002	2.3J	1.1J	<5	1.3J	ND
S59B	4/10/2001	<1	<1	<1	ND	ND
S59B	1/10/2002	<1	<1	<1	ND	ND
S59B	4/12/2002	<1	<1	<1	ND	ND
S59C	4/10/2001	<1	<1	<1	ND	ND
S59C	1/10/2002	<1	<1	<1	ND	ND
S59C	4/12/2002	0.33J	<1	<1	ND	ND
S59D	4/10/2001	<1	<1	<1	ND	ND
S59D	1/10/2002	<1	<1	<1	ND	ND
S59D	4/12/2002	<1	<1	<1	ND	ND
S60B	4/10/2001	<1	<1	<1	ND	ND
S60B	1/10/2002	0.14J	<1	<1	ND	ND
S60B	4/12/2002	0.25J	<1	<1	ND	ND
S60C	4/10/2001	<1	<1	<1	ND	ND
S60C	1/10/2002	<1	0.27J	<1	ND	ND
S60C	4/12/2002	<1	0.3J	<1	ND	ND
S60D	4/10/2001	<1	<1	<1	ND	ND
S60D	1/10/2002	<1	<1	<1	ND	ND
S60D	4/12/2002	<1	<1	<1	ND	ND
S67B	1/10/2002	<10	<10	<10	ND	ND
S67B	4/12/2002	<10	<10	<10	ND	ND
S67C	1/10/2002	<10	<10	<10	ND	ND
S67C	4/12/2002	<10	<10	<10	ND	ND
S67D	1/10/2002	<1	<1	<1	ND	ND
S67D	4/12/2002	<2.5	<2.5	<2.5	ND	ND
S68B	4/11/2002	<1	<1	<1	ND	ND
S68C	4/11/2002	<1	<1	<1	ND	ND
S68D	4/11/2002	<1	<1	<1	ND	ND
S69B	4/10/2002	<1	<1	<1	ND	ND
S69C	4/10/2002	<1	<1	<1	ND	ND
S69D	4/10/2002	<1	<1	<1	ND	ND
S70B	4/10/2002	<1	<1	<1	ND	ND
S70C	4/10/2002	<1	<1	<1	ND	ND
S70D	4/10/2002	<1	<1	<1	ND	ND
S71B	4/11/2002	<1	<1	<1	ND	ND
S71C	4/11/2002	<1	<1	<1	ND	ND
S71D	4/11/2002	<1	<1	<1	ND	ND
S72B	4/9/2002	<1	<1	<1	ND	ND
S72C	4/10/2002	<1	<1	<1	ND	ND

Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
S72D	4/10/2002	<1	<1	<1	ND	ND
S73B	4/10/2002	<1	<1	<1	ND	ND
S73C	4/10/2002	<1	<1	<1	ND	ND
S73D	4/10/2002	<1	<1	<1	ND	ND
TE03	4/12/2001	<1	<1	<1	ND	ND
TE03	10/6/2001	<1	<1	<1	ND	ND
TE03	1/16/2002	<1	<1	<1	ND	ND
TE03	4/13/2002	<1	<1	<1	ND	ND
PIN15		Northeast Site				
0506	4/4/2001	<1	<1	<1	ND	ND
0506	10/3/2001	<1	<1	<1	ND	ND
0506	4/17/2002	<1	<1	<1	ND	ND
0507	4/4/2001	<1	<1	<1	ND	ND
0507	10/3/2001	<1	<1	<1	ND	ND
0507	4/17/2002	<1	<1	<1	ND	ND
0510	4/11/2001	<1	<1	<1	ND	ND
0510	4/17/2002	<1	<1	<1	ND	ND
0513	4/4/2001	<1	<1	<1	ND	ND
0513	4/18/2002	<1	<1	<1	ND	ND
0514	4/10/2001	27	510	<10	3.1J	537
0514	7/12/2001	11	23	0.73J	3.4	37.4
0514	10/5/2001	1	<1	<1	ND	1
0514	1/8/2002	7.9	1.6	0.4J	1.3	10.8
0514	4/17/2002	<1	<1	<1	ND	ND
0515	4/10/2001	<1	<1	<1	ND	ND
0515	7/12/2001	<1	<1	<1	ND	ND
0515	10/5/2001	<1	<1	<1	ND	ND
0515	1/8/2002	<1	<1	<1	ND	ND
0515	4/17/2002	<1	<1	<1	ND	ND
0516	4/10/2001	<1	<1	<1	ND	ND
0516	7/12/2001	<1	<1	<1	ND	ND
0516	10/5/2001	<1	<1	<1	ND	ND
0516	1/8/2002	<1	<1	<1	ND	ND
0516	4/17/2002	<1	<1	<1	ND	ND
0518	4/6/2001	<1	<1	<1	ND	ND
0518	4/18/2002	<1	<1	<1	ND	ND
0520	4/4/2001	<1	<1	<1	ND	ND
0520	7/14/2001	<1	<1	<1	ND	ND
0520	10/3/2001	<1	<1	<1	ND	ND
0520	4/17/2002	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0523	4/6/2001	<1	<1	<1	ND	ND
0523	4/18/2002	<1	<1	<1	ND	ND
0530	4/10/2001	<1	<1	<1	ND	ND
0530	7/11/2001	<1	<1	<1	ND	ND
0530	10/5/2001	<1	<1	<1	ND	ND
0530	1/8/2002	<1	<1	<1	ND	ND
0530	4/17/2002	<1	<1	<1	ND	ND
0531	4/5/2001	<1	<1	<1	ND	ND
0531	4/19/2002	<1	<1	<1	ND	ND
0533	4/12/2001	<250	39J	<250	114J	ND
0533	4/19/2002	<250	<250	<250	ND	ND
0534	4/4/2001	<1	<1	<1	ND	ND
0534	7/14/2001	<1	<1	<1	ND	ND
0534	10/3/2001	<1	<1	<1	ND	ND
0534	4/17/2002	<1	<1	<1	ND	ND
0535	4/10/2001	2	0.69J	<1	ND	2
0535	7/11/2001	1.6	0.64J	<1	ND	1.6
0535	10/5/2001	1.2	0.8J	<1	ND	1.2
0535	1/8/2002	1.5	1	<1	0.15J	2.5
0535	4/17/2002	2	0.88J	<1	0.35J	2
0536	4/11/2001	<250	81J	<250	ND	ND
0536	7/13/2001	<1,000	<1,000	<1,000	ND	ND
0536	10/9/2001	<2,500	<2,500	<2,500	ND	ND
0536	1/9/2002	<2,500	<2,500	<2,500	ND	ND
0536	4/19/2002	<1,000	<1,000	<1,000	ND	ND
0537	4/11/2001	<250	130J	<250	ND	ND
0537	7/13/2001	<250	<250	<250	ND	ND
0537	10/5/2001	<250	<250	<250	132J	ND
0537	1/10/2002	<250	31J	<250	ND	ND
0537	4/18/2002	<50	<50	<50	ND	ND
0538	4/6/2001	<2,500	5,300	<2,500	ND	5,300
0538	1/10/2002	75J	2,000	<500	ND	2,000
0538	4/18/2002	<250	550	<250	ND	550
0557	4/6/2001	0.32J	<1	<1	ND	ND
0557	7/13/2001	0.13J	<1	<1	ND	ND
0557	10/5/2001	<1	<1	<1	ND	ND
0557	4/18/2002	<1	<1	<1	ND	ND
0558	4/11/2001	<500	69J	<500	ND	ND
0558	7/13/2001	28J	<250	<250	30J	ND
0558	10/4/2001	<250	<250	<250	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0558	1/10/2002	13J	<50	<50	ND	ND
0558	4/16/2002	<250	<250	<250	ND	ND
0559	4/11/2001	0.17J	<1	<1	ND	ND
0559	7/13/2001	<1	0.14J	<1	ND	ND
0559	10/4/2001	0.18J	0.17J	<1	0.12J	ND
0559	1/14/2002	0.12J	0.72J	<1	0.2J	ND
0559	4/17/2002	<1	<1	<1	ND	ND
0560	10/10/2001	<1	<1	<1	ND	ND
0560	1/11/2002	<1	<1	<1	ND	ND
0560	4/19/2002	<1	<1	<1	ND	ND
0561	10/10/2001	<1	<1	<1	ND	ND
0561	1/11/2002	<1	<1	<1	ND	ND
0561	4/19/2002	<1	<1	<1	ND	ND
0562	10/11/2001	<1	<1	<1	ND	ND
0562	1/11/2002	<1	<1	<1	ND	ND
0562	4/18/2002	<1	<1	<1	ND	ND
0563	10/11/2001	0.24J	<1	<1	ND	ND
0563	1/11/2002	<1	<1	<1	ND	ND
0563	4/18/2002	<1	<1	<1	ND	ND
0564	10/10/2001	0.22J	0.29J	<1	ND	ND
0564	1/11/2002	<1	<1	0.22J	0.76J	ND
0564	4/18/2002	<1	<1	<1	ND	ND
0565	10/10/2001	<1	0.48J	<1	ND	ND
0565	1/11/2002	<1	0.71J	<1	ND	ND
0565	4/18/2002	<1	<1	<1	ND	ND
0566	10/10/2001	0.26J	3.4	0.22J	0.86J	3.4
0566	1/11/2002	1.1	3.7	0.17J	0.64J	4.8
0566	4/19/2002	3.2	5.6	<1	0.62J	8.8
0567	10/10/2001	<1	<1	<1	0.11J	ND
0567	1/11/2002	0.2J	<1	<1	ND	ND
0567	4/19/2002	<1	<1	<1	ND	ND
M03D	4/6/2001	4.3	0.14J	<1	1.32J	4.3
M03D	7/13/2001	0.31J	<1	<1	3	3
M03D	10/4/2001	2.2	<1	<1	1.36J	2.2
M03D	4/18/2002	<1	<1	<1	ND	ND
M03S	4/6/2001	<1	<1	<1	0.16J	ND
M03S	4/18/2002	<1	<1	<1	ND	ND
M12D	4/4/2001	<1	<1	<1	ND	ND
M12D	7/14/2001	<1	<1	<1	ND	ND
M12D	10/4/2001	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
M12D	4/18/2002	<1	<1	<1	ND	ND
M12S	4/4/2001	<1	<1	<1	ND	ND
M12S	4/18/2002	<1	<1	<1	0.32J	ND
M14D	4/5/2001	<1	<1	<1	ND	ND
M14D	10/4/2001	<1	<1	<1	ND	ND
M14D	4/17/2002	<1	<1	<1	ND	ND
M14S	4/5/2001	<1	<1	<1	ND	ND
M14S	4/17/2002	<1	<1	<1	ND	ND
M16D	4/6/2001	<1	<1	<1	ND	ND
M16D	7/13/2001	<1	<1	<1	ND	ND
M16D	10/4/2001	<1	<1	<1	ND	ND
M16D	4/18/2002	<1	<1	<1	ND	ND
M16S	4/6/2001	<1	<1	<1	ND	ND
M16S	10/4/2001	<1	<1	<1	ND	ND
M16S	4/18/2002	<1	<1	<1	ND	ND
M17D	4/12/2001	780J	43,000	<5,000	ND	43,000
M17D	4/18/2002	<2,500	62,000	<2,500	ND	62,000
M17S	4/12/2001	7.7	0.35J	<1	ND	7.7
M17S	4/18/2002	<1	28	<1	ND	28
M24D	4/5/2001	<1	<1	<1	ND	ND
M24D	4/18/2002	<1	<1	<1	ND	ND
M27D	4/3/2001	18	1.8	0.84J	1.9	21.7
M27D	7/10/2001	19	2.5	0.68J	1.7	23.2
M27D	10/8/2001	16	2.1	0.85J	2.1	20.2
M27D	1/8/2002	10	1.2	0.46J	0.32J	11.2
M27D	4/17/2002	21	2.2	0.99J	2	25.2
M27S	4/4/2001	<1	<1	<1	ND	ND
M27S	7/10/2001	<1	<1	<1	ND	ND
M27S	10/8/2001	<1	<1	<1	ND	ND
M27S	1/8/2002	<1	<1	<1	ND	ND
M27S	4/17/2002	<1	<1	<1	ND	ND
M29D	4/10/2001	4.1	<1	<1	1.12J	4.1
M29D	7/12/2001	1.6	<1	<1	1.01J	1.6
M29D	10/6/2001	<1	<1	<1	ND	ND
M29D	1/9/2002	1	<1	<1	0.12J	1
M29D	4/17/2002	0.9J	<1	<1	ND	ND
M29S	4/10/2001	<1	<1	<1	ND	ND
M29S	7/12/2001	<1	<1	<1	ND	ND
M29S	10/6/2001	<1	<1	<1	ND	ND
M29S	1/9/2002	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
M29S	4/17/2002	<1	<1	<1	ND	ND
M30D	4/10/2001	0.37J	<1	<1	ND	ND
M30D	4/18/2002	<1	<1	<1	ND	ND
M30S	4/6/2001	<1	<1	<1	ND	ND
M30S	4/18/2002	<2.5	<2.5	<2.5	ND	ND
M31D	4/12/2001	22J	32J	<50	27J	ND
M31D	7/13/2001	18J	17J	<50	ND	ND
M31D	10/5/2001	0.53J	0.94J	<2.5	ND	ND
M31D	1/10/2002	<50	34J	<50	ND	ND
M31D	4/19/2002	11	4.4J	<5	ND	11
M31S	4/12/2001	6.3J	<10	<10	ND	ND
M31S	7/13/2001	3.2J	<10	<10	ND	ND
M31S	10/5/2001	2	<1	<1	ND	2
M31S	1/10/2002	3	0.25J	<1	ND	3
M31S	4/19/2002	3.2	<1	<1	ND	3.2
M32D	4/11/2001	<1	<1	<1	ND	ND
M32D	7/12/2001	0.78J	<1	0.25J	ND	ND
M32D	10/4/2001	0.6J	<1	<1	ND	ND
M32D	1/8/2002	0.23J	<1	<1	ND	ND
M32D	4/17/2002	3.1	<1	<1	ND	3.1
M32S	4/11/2001	<1	<1	<1	ND	ND
M32S	7/12/2001	<1	<1	<1	ND	ND
M32S	10/4/2001	<1	<1	<1	ND	ND
M32S	1/8/2002	<1	<1	<1	ND	ND
M32S	4/17/2002	<1	<1	<1	ND	ND
M33D	4/5/2001	<1	<1	<1	ND	ND
M33D	10/5/2001	<1	<1	<1	ND	ND
M33D	4/18/2002	<1	<1	<1	ND	ND
M34D	4/12/2001	<500	170J	<500	ND	ND
M34D	7/13/2001	<500	320J	<500	ND	ND
M34D	10/8/2001	46J	100J	<250	ND	ND
M34D	1/10/2002	47J	48J	100J	ND	ND
M34D	4/19/2002	<500	3,400	<500	ND	3,400
M35D	4/12/2001	<50,000	95,000	<50,000	ND	95,000
M35D	4/19/2002	<100,000	170,000	<100,000	ND	170,000
M36D	4/12/2001	220J	12,000	210J	490J	12,000
M36D	4/19/2002	210J	25,000	<250	ND	25,000
M37D	4/12/2001	190J	8,400	<500	ND	8,400
M37D	4/19/2002	100	2,600	<100	ND	2,700
RW06	7/18/2001	<5,000	19,000	<5,000	ND	19,000

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
RW06	1/11/2002	<5,000	43,000	<5,000	ND	43,000
RW06	4/17/2002	<25,000	94,000	<25,000	ND	94,000
RW11	4/11/2001	<1,000	9,200	<1,000	ND	9,200
RW11	7/23/2001	18J	1,600	<50	ND	1,600
RW11	10/22/2001	2.3J	7.9J	<10	ND	ND
RW11	1/10/2002	56J	3,000	<250	ND	3,000
RW11	4/17/2002	37J	1,700	<50	12J	1,700
RW12	4/11/2001	<500	1,600	<500	ND	1,600
RW12	7/13/2001	<500	2,700	<500	ND	2,700
RW12	10/8/2001	<500	2,800	<500	ND	2,800
RW12	1/10/2002	32J	1,300	<250	ND	1,300
RW12	4/17/2002	<250	2,300	<250	ND	2,300
RW13	4/9/2001	<250	580	<250	ND	580
RW13	7/12/2001	23J	260	<50	ND	260
RW13	10/8/2001	14J	160	<50	ND	160
RW13	1/10/2002	9.3	94	0.58J	1	104.3
RW13	4/17/2002	23J	120	3.4J	6.9J	120
RW14	4/9/2001	<250	1,400	<250	ND	1,400
RW14	7/12/2001	<250	820	190J	620	1,440
RW14	10/8/2001	2.4J	17	<5	ND	17
RW14	1/11/2002	29J	550	24J	62	612
RW14	4/17/2002	27J	310	<50	11J	310
RW15	4/9/2001	<100	22J	<100	ND	ND
RW15	7/12/2001	<100	23J	<100	ND	ND
RW15	10/8/2001	<100	38J	<100	ND	ND
RW15	1/11/2002	5.9J	14J	<25	12.7J	ND
RW15	4/17/2002	<25	<25	<25	ND	ND
RW16	4/9/2001	<50	41J	<50	ND	ND
RW16	7/23/2001	6.8J	8.4J	<50	ND	ND
RW16	10/22/2001	<50	<50	<50	ND	ND
RW16	1/10/2002	<50	<50	<50	ND	ND
RW16	4/17/2002	<50	<50	<50	ND	ND
RW17	4/9/2001	<1,000	8,100	<1,000	ND	8,100
RW17	7/23/2001	<1,000	3,900	<1,000	ND	3,900
RW17	10/22/2001	<1,000	3,100	<1,000	ND	3,100
RW17	1/10/2002	<1,000	1,700	<1,000	ND	1,700
RW17	4/17/2002	<1	3.4	<1	ND	3.4
PIN18		Wastewater Neutralization Area				
0500	4/11/2001	<1	<1	<1	ND	ND
0500	4/16/2002	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0501	4/11/2001	0.93J	<1	<1	0.65J	ND
0501	4/16/2002	<1	<1	<1	ND	ND
0502	4/11/2001	<1	<1	<1	ND	ND
0502	4/16/2002	<1	<1	<1	ND	ND
0503	4/7/2001	<1	<1	<1	ND	ND
0503	4/13/2002	<1	<1	<1	ND	ND
0504	4/12/2001	<1	<1	<1	ND	ND
0504	4/16/2002	<1	<1	<1	ND	ND
0505	4/7/2001	<1	<1	<1	ND	ND
0505	4/13/2002	<1	<1	<1	ND	ND
0506	4/7/2001	<1	<1	<1	ND	ND
0506	4/13/2002	<1	<1	<1	ND	ND
0507	4/7/2001	<1	<1	<1	ND	ND
0507	4/13/2002	<1	<1	<1	ND	ND
0508	4/12/2001	<1	<1	<1	ND	ND
0508	4/16/2002	0.32J	<1	<1	0.36J	ND
0509	4/7/2001	<1	<1	<1	ND	ND
0509	4/13/2002	<1	<1	<1	ND	ND
0510	4/13/2002	<1	<1	<1	ND	ND
0511	4/10/2001	<1	<1	<1	ND	ND
0511	4/16/2002	<1	<1	<1	ND	ND
0512	4/10/2001	<1	<1	<1	ND	ND
0512	4/16/2002	<1	<1	<1	ND	ND
0513	4/10/2001	<1	<1	<1	ND	ND
0513	4/16/2002	<1	<1	<1	ND	ND
0514	4/7/2001	<1	<1	<1	ND	ND
0514	4/13/2002	<1	<1	<1	ND	ND
0515	4/15/2002	<1	<1	<1	ND	ND
0516	4/12/2001	<1	<1	<1	ND	ND
0516	4/15/2002	<1	<1	<1	ND	ND
0517	4/7/2001	<1	<1	<1	ND	ND
0517	4/13/2002	<1	<1	<1	ND	ND
0518	4/7/2001	<1	<1	<1	ND	ND
0518	4/13/2002	<1	<1	<1	ND	ND
0519	4/7/2001	1.2	<1	<1	ND	1.2
0519	4/13/2002	0.71J	<1	<1	ND	ND
0520	4/11/2001	<1	<1	<1	ND	ND
0520	4/15/2002	<1	<1	<1	ND	ND
0521	4/11/2001	<1	<1	<1	ND	ND
0521	4/15/2002	<1	<1	<1	ND	ND

Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes ^a	Total BTEX ^b
0522	4/11/2001	<1	<1	<1	ND	ND
0522	4/15/2002	<1	<1	<1	ND	ND
0523	4/15/2002	<1	<1	<1	ND	ND
0524	4/11/2001	<1	<1	<1	ND	ND
0524	4/15/2002	<1	<1	<1	ND	ND
0525	4/16/2002	<1	<1	<1	ND	ND
0526	4/12/2001	<1	<1	1.1	2.2	3.3
0526	4/16/2002	1.3	<1	1	1.4	3.7
RW02	4/11/2001	<1	<1	<1	ND	ND
RW02	7/12/2001	<1	<1	<1	ND	ND
RW02	10/11/2001	<1	<1	<1	ND	ND
RW02	1/10/2002	<1	<1	<1	ND	ND
RW02	4/16/2002	<1	<1	<1	ND	ND
RW03	4/11/2001	<1	<1	<1	ND	ND
RW03	7/12/2001	<1	<1	<1	ND	ND
RW03	10/11/2001	<1	<1	<1	ND	ND
RW03	1/10/2002	<1	<1	0.21J	0.14J	ND
RW03	4/15/2002	<1	<1	<1	ND	ND
PIN21		Perimeter Monitoring Wells				
0500	4/11/2001	<1	<1	<1	ND	ND
0500	1/9/2002	<1	<1	<1	ND	ND
0500	4/9/2002	<1	<1	<1	ND	ND
0501	4/11/2001	<1	<1	<1	ND	ND
0501	10/3/2001	<1	<1	<1	ND	ND
0501	1/9/2002	<1	<1	<1	ND	ND
0501	4/9/2002	<1	<1	<1	ND	ND
0502	4/11/2001	<1	<1	<1	ND	ND
0502	1/9/2002	<1	<1	<1	ND	ND
0502	4/13/2002	<1	<1	<1	ND	ND
0503	4/11/2001	<1	<1	<1	ND	ND
0503	7/10/2001	<1	<1	<1	ND	ND
0503	10/3/2001	<1	<1	<1	ND	ND
0503	1/9/2002	<1	<1	<1	ND	ND
0503	4/13/2002	<1	<1	<1	ND	ND
0504	4/12/2001	<1	<1	<1	ND	ND
0504	1/9/2002	<1	<1	<1	ND	ND
0504	4/17/2002	<1	0.17J	<1	ND	ND
0505	4/12/2001	<1	<1	<1	ND	ND
0505	7/10/2001	<1	<1	<1	ND	ND
0505	10/3/2001	<1	<1	<1	ND	ND

*Table 10 (continued). BTEX Compounds in Samples Collected at the STAR Center
(reported in micrograms per liter)*

Location	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes^a	Total BTEX^b
0505	1/9/2002	<1	<1	<1	ND	ND
0505	4/17/2002	<1	<1	<1	ND	ND
0512	4/11/2001	<1	<1	<1	ND	ND
0512	7/10/2001	<1	<1	<1	ND	ND
0512	10/3/2001	<1	<1	<1	ND	ND
0512	1/9/2002	<1	<1	<1	ND	ND
0512	4/16/2002	<1	<1	<1	ND	ND

^a m-, o-, p- Xylene if detected.

^b "J" values are not included in the "Total BTEX" value.

ND = Not detected.

J = Estimated value, result is between the reporting limit and the method detection.

Table 11. Additional VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Bromo-methane	Chloro-form	Chloro-methane	cis-1,3-Dichloro-propene	Dichloro-difluoro-methane	MTBE	Tetrachloro-ethene	Trichloro-fluoro-methane
PIN06		Old Drum Storage Site														
0500	4/12/2001				2								0.39J			1
0500	1/16/2002				0.21J											0.41J
0500	4/12/2002														0.31J	
0501	4/12/2001							2.1								
0501	1/16/2002			0.32J			1.2	9.3								
0501	4/12/2002						1.8	9.6								
PIN09		Incinerator Site														
0500	4/12/2001												2			2.4
0500	1/15/2002												0.34J			1.7
PIN12		Industrial Drain Leaks Building 100														
0509	4/12/2001															19
0509	10/10/2001															11
0509	4/17/2002															110
0515	10/7/2001												1.2			
0520	4/12/2002														0.83J	
0521	4/12/2001												11			9.3
0521	10/10/2001				0.32J						0.16J		3.5			4
0521	1/16/2002				0.36J								1.9			5.3
0521	4/12/2002				0.55J											
0523	4/12/2002											0.15J				
0524	4/7/2001														0.63J	5.2
0524	1/15/2002															5.5J
0524	4/13/2002	4.7J														24
0525	1/15/2002												0.77J			
0525	4/13/2002														0.38J	
RW01	1/14/2002														22J	
RW02	7/13/2001													110J		
S29C	4/16/2002												0.64J			0.58J

Table 11 (continued). Additional VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Bromo-methane	Chloro-form	Chloro-methane	cis-1,3-Dichloro-propene	Dichloro-difluoro-methane	MTBE	Tetrachloro-ethene	Trichloro-fluoro-methane
S31B	4/10/2001												1.5			
S31B	1/11/2002												0.37J			
S32B	4/10/2001												220			3J
S32B	1/11/2002												14			
S32B	4/16/2002												43			
S33C	4/9/2001												8.8			
S33C	4/16/2002												18			6.2
S35B	4/15/2002									620J					130J	
S37B	4/10/2001												9.7			
S37B	4/16/2002												6.4			2J
S55C	1/12/2002									16J						
S57D	4/9/2001															1.1J
S59C	4/10/2001															0.81J
S59C	1/10/2002															2.8
S59C	4/12/2002															1.1
S67B	1/10/2002												21			
PIN15	Northeast Site															
0506	10/3/2001									0.55J						
0510	4/17/2002									0.49J						
0514	7/12/2001								1.8					2.4J		
0533	4/12/2001														33J	
0536	7/13/2001													2,300J		
0557	4/6/2001															0.95J
0557	7/13/2001															1.2
0557	10/5/2001															0.73J
0560	1/11/2002												2.5			
0562	1/11/2002															0.86J
0562	4/18/2002										2.4					
0563	10/11/2001									0.42J						
M03D	4/6/2001													8.9J		

Table 11 (continued). Additional VOCs in Samples Collected at the STAR Center
(reported in micrograms per liter)

Location	Date Sampled	1,1,1-Trichloro-ethane	1,1,2,2-Tetrachloro-ethane	1,2-Dichloro-benzene	1,2-Dichloro-ethane	1,2-Dichloro-propane	1,3-Dichloro-benzene	1,4-Dichloro-benzene	Bromo-methane	Chloro-form	Chloro-methane	cis-1,3-Dichloro-propene	Dichloro-difluoro-methane	MTBE	Tetrachloro-ethene	Trichloro-fluoro-methane
M14S	4/17/2002										2					
M16D	7/13/2001															0.14J
M16D	4/18/2002										4.8					
M16S	4/18/2002										2.1					
M27D	7/10/2001												0.42J			0.31J
M29D	1/9/2002												0.91J			
M30D	4/18/2002										3.1					
M32D	4/17/2002															2.4
M35D	4/12/2001		18,000J													
M36D	4/12/2001								170J							
RW06	7/18/2001										9,200					
RW11	10/22/2001											18				
RW14	4/9/2001														41J	
RW14	7/12/2001					110J										
PIN18	Wastewater Neutralization Area															
0504	4/16/2002														0.14J	
0519	4/13/2002															0.46J
0523	4/15/2002														0.41J	
0524	4/15/2002														0.56J	
0525	4/16/2002														0.33J	
0512	1/9/2002															0.38J
0512	4/16/2002															0.18J

J Estimated value, result is between the reporting limit and the method detection limit.

*Table 12. RCRA Metals and Mercury in Samples Collected at the STAR Center
(reported in milligrams per liter)*

Location	Date	Sample ID ^a	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
PIN06	Old Drum Storage Site									
0500	4/12/2002	N001	0.022	0.057	<0.005	<0.01	0.0054	<0.0002	<0.01	<0.01
0501	4/12/2002	N001	0.0081J	0.076	<0.005	<0.01	0.0047J	<0.0002	<0.01	<0.01
PIN09	Incinerator Site									
0500	4/12/2002	N001	0.018	0.075	<0.005	<0.01	0.0091	<0.0002	<0.01	<0.01
PIN10	Incinerator Ditch									
0500	4/12/2002	N001	0.085J	0.037	0.0026J	<0.01	0.0028J	0.00016J	<0.01	<0.01
PIN12	Industrial Drain Leaks Building 100									
0508	4/17/2002	N001	<0.01	0.038	<0.005	<0.01	0.0032J	<0.0002	<0.005	<0.01
0509	4/17/2002	N001	<0.01	0.08	<0.005	<0.01	0.0071	<0.0002	<0.005	<0.01
0510	4/11/2002	N001	<0.01	0.066	<0.005	<0.01	0.0058	<0.0002	<0.01	<0.01
0511	4/15/2002	N001	<0.01	0.015	<0.005	<0.01	0.0032J	<0.0002	<0.01	<0.01
0512	4/13/2002	N001	<0.01	0.034	<0.005	<0.01	0.0024J	<0.0002	<0.01	<0.01
0513	4/11/2002	N001	0.0034J	0.057	<0.005	<0.01	0.0043J	<0.0002	<0.01	<0.01
0514	4/11/2002	N001	<0.01	0.065	<0.005	<0.01	0.0063	0.000074J	<0.01	<0.01
0515	4/13/2002	N001	<0.01	0.043	<0.005	<0.01	0.004J	<0.0002	<0.01	<0.01
0516	4/13/2002	N001	<0.01	0.048	<0.005	0.0021J	0.0062	<0.0002	<0.01	<0.01
0517	4/13/2002	N001	<0.01	0.043	<0.005	0.006J	0.0032J	<0.0002	<0.01	<0.01
0518	4/13/2002	N001	<0.01	0.02	<0.005	<0.01	0.0033J	<0.0002	<0.01	<0.01
0520	4/12/2002	N001	<0.01	0.043	<0.005	0.0099J	0.0081	<0.0002	<0.01	<0.01
0521	4/12/2002	N001	<0.01	0.052	<0.005	<0.01	0.0055	<0.0002	<0.01	<0.01
0522	4/12/2002	N001	<0.01	0.033	<0.005	<0.01	0.0051	<0.0002	<0.01	<0.01
0523	4/12/2002	N001	0.0065J	0.049	<0.005	<0.01	0.0039J	<0.0002	<0.01	<0.01
0524	4/13/2002	N001	<0.01	0.054	<0.005	<0.01	0.005	<0.0002	<0.01	0.0024J
0525	4/13/2002	N001	0.027	0.056	<0.005	<0.01	0.0047J	<0.0002	<0.01	<0.01
0526	4/13/2002	N001	<0.01	0.086	<0.005	<0.01	0.0064	<0.0002	<0.01	0.0028J
0527	4/15/2002	N001	<0.01	0.075	<0.005	<0.01	<0.005	<0.0002	<0.01	<0.01
0528	4/15/2002	N001	<0.01	0.056	<0.005	<0.01	0.0032J	<0.0002	<0.01	<0.01
RW01	4/2/2002	N001	<0.01	0.038	<0.005	<0.01	<0.005	<0.0002	<0.01	<0.01
RW01	4/11/2002	N001	<0.01	0.038	<0.005	<0.01	0.0059	<0.0002	<0.01	<0.01
RW01	5/8/2002	N001	<0.01	0.039	<0.005	0.011	0.0017J	<0.0002	<0.01	<0.01
RW02	4/2/2002	N001	<0.01	0.033	<0.005	<0.01	<0.005	<0.0002	<0.01	<0.01
RW02	4/11/2002	N001	<0.01	0.032	<0.005	<0.01	0.0034J	<0.0002	<0.01	<0.01
RW02	5/8/2002	N001	<0.01	0.032	<0.005	0.0019J	<0.005	<0.0002	<0.01	<0.01
S29C	4/16/2002	N001	0.0065J	0.048	<0.005	<0.01	0.004J	<0.0002	<0.005	<0.01
S30B	4/16/2002	N001	0.0032J	0.06	<0.005	0.0017J	0.0063	<0.0002	<0.005	<0.01
S31B	4/16/2002	N001	0.03	0.046	<0.005	<0.01	0.0036J	<0.0002	<0.005	<0.01
S32B	4/16/2002	N001	0.035	0.09	<0.005	<0.01	0.0054	<0.0002	<0.005	<0.01
S33C	4/16/2002	N001	0.014	0.071	<0.005	0.02	0.005	<0.0002	<0.005	0.002J
S35B	4/15/2002	N001	0.022	0.65	<0.005	0.012	0.0068	<0.0002	<0.005	0.0042J
S36B	4/16/2002	N001	0.006J	0.042	<0.005	0.0064J	0.0024J	<0.0002	<0.005	<0.01
S37B	4/16/2002	N001	0.018	0.063	<0.005	0.0086J	0.0031J	<0.0002	<0.005	<0.01
S54D	4/15/2002	N001	<0.01	0.034	<0.005	0.002J	0.0036J	<0.0002	<0.005	<0.01
S55B	4/15/2002	N001	0.0039J	0.047	0.00011J	0.026	0.004J	<0.0002	0.03	<0.01

Table 12 (continued). RCRA Metals and Mercury in Samples Collected at the STAR Center
(reported in milligrams per liter)

Location	Date	Sample ID ^a	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
S55C	4/15/2002	N001	<0.01	0.051	0.00098J	0.016	0.0039J	<0.0002	0.023	<0.01
S56B	4/15/2002	N001	0.018	0.17	0.00024J	0.096	0.026	<0.0002	0.039	<0.01
S56C	4/15/2002	N001	<0.01	0.086	0.00079J	0.021	0.011	<0.0002	0.012	<0.01
S56D	4/15/2002	N001	<0.01	0.12	0.00092J	0.26	0.0098	<0.0002	<0.01	<0.01
S57B	4/15/2002	N001	0.0054J	0.11	0.00012J	0.051	0.014	<0.0002	0.019	<0.01
S57C	4/15/2002	N001	<0.01	0.056	<0.005	0.013	0.0087	<0.0002	0.033	<0.01
S57D	4/15/2002	N001	<0.01	0.092	0.00074J	0.016	0.006	<0.0002	0.0054J	<0.01
S59B	4/12/2002	N001	<0.01	0.047	<0.005	0.016	<0.005	0.000094J	0.0057J	<0.01
S59C	4/12/2002	N001	0.0038J	0.052	<0.005	0.0081J	<0.005	0.000099J	0.013	<0.01
S59D	4/12/2002	N001	<0.01	0.032	<0.005	<0.01	<0.005	0.00015J	<0.01	<0.01
S60B	4/12/2002	N001	<0.01	0.053	<0.005	<0.01	<0.002	<0.0002	<0.01	<0.01
S60C	4/12/2002	N001	0.0046J	0.056	<0.005	<0.01	<0.005	<0.0002	<0.01	<0.01
S60D	4/12/2002	N001	0.005J	0.12	<0.005	0.0026J	<0.005	<0.0002	0.01	<0.01
S67B	4/12/2002	N001	<0.01	0.052	0.005	0.009J	0.0053	<0.0002	<0.01	<0.01
S67C	4/12/2002	N001	0.0033J	0.051	<0.005	0.0034J	0.0055	<0.0002	<0.01	<0.01
S67D	4/12/2002	N001	0.0033J	0.062	<0.005	0.02	0.0072	<0.0002	<0.01	<0.01
S68B	4/11/2002	N001	0.039	0.088	<0.005	0.021	0.013	<0.0002	<0.01	<0.01
S68C	4/11/2002	N001	0.0038J	0.045	<0.005	0.004J	0.0041J	<0.0002	<0.01	<0.01
S68D	4/11/2002	N001	0.00515	0.099	0.0031J	0.056	0.016	<0.0002	<0.01	<0.01
S69B	4/10/2002	N001	0.018	0.14	<0.005	0.12	0.023	0.00017J	<0.01	0.0031J
S69C	4/10/2002	N001	0.0068J	0.14	<0.005	0.11	0.018	<0.0002	<0.01	<0.01
S69D	4/10/2002	N001	0.0037J	0.06	<0.005	0.013	0.0065	<0.0002	<0.01	<0.01
S70B	4/10/2002	N001	0.0075J	0.075	<0.005	0.017	0.0092	<0.0002	<0.01	<0.01
S70C	4/10/2002	N001	0.0091J	0.19	<0.005	0.16	0.023	0.00011J	0.0067J	<0.01
S70D	4/10/2002	N001	<0.01	0.057	<0.005	0.0094J	0.0068	<0.0002	<0.01	<0.01
S71B	4/11/2002	N001	0.0075J	0.072	<0.005	0.02	0.0078	<0.0002	<0.01	<0.01
S71C	4/11/2002	N001	0.01	0.14	<0.005	0.12	0.024	0.00019J	<0.01	0.0023J
S71D	4/11/2002	N001	0.0085J	0.15	<0.005	0.093	0.026	<0.0002	<0.01	0.0033J
S72B	4/9/2002	N001	0.011	0.13	<0.005	0.045	0.0094	<0.0002	<0.01	<0.01
S72C	4/10/2002	N001	0.006J	0.079	<0.005	0.057	0.0095	<0.0002	<0.01	<0.01
S72D	4/10/2002	N001	<0.01	0.038	<0.005	0.0049J	0.0032J	<0.0002	<0.01	<0.01
S73B	4/10/2002	N001	0.013	0.073	<0.005	0.035	0.014	<0.0002	<0.01	<0.01
S73C	4/10/2002	N001	0.013	0.22	<0.005	0.088	0.025	<0.0002	<0.01	<0.01
S73D	4/10/2002	N001	0.0067J	0.089	0.0015J	0.11	0.022	<0.0002	<0.01	<0.01
TE03	4/13/2002	N001	0.0039J	0.028	<0.005	0.0032J	0.0022J	<0.0002	<0.01	<0.01
PIN18	Wastewater Neutralization Area									
0503	4/13/2002	N001	0.0068J	0.044	<0.005	<0.01	0.0022J	<0.0002	<0.01	<0.01
0505	4/13/2002	N001	0.0056J	0.035	<0.005	<0.01	0.0029J	<0.0002	<0.01	<0.01
0506	4/13/2002	N001	0.0041J	0.029	<0.005	<0.01	<0.005	<0.0002	<0.01	<0.01
0507	4/13/2002	N001	<0.01	0.038	<0.005	0.0038J	0.0044J	<0.0002	<0.01	<0.01
0509	4/13/2002	N001	<0.01	0.03	<0.005	<0.01	0.0048J	<0.0002	<0.01	<0.01
0510	4/13/2002	N001	0.0037J	0.066	<0.005	0.0095J	0.0071	<0.0002	<0.01	<0.01
0518	4/13/2002	N001	0.0038J	0.043	<0.005	<0.01	0.0034J	<0.0002	<0.01	<0.01

*Table 12 (continued). RCRA Metals and Mercury in Samples Collected at the STAR Center
(reported in milligrams per liter)*

Location	Date	Sample ID ^a	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
PIN21	Perimeter Monitoring Wells									
0500	4/9/2002	N001	<0.01	0.041	<0.005	0.0039J	0.0048J	<0.0002	<0.01	<0.01
0501	4/9/2002	N001	<0.01	0.067	<0.005	<0.01	0.0062	<0.0002	<0.01	<0.01
0502	4/13/2002	N001	0.005J	0.055	<0.005	<0.01	0.0057	<0.0002	<0.01	<0.01
0503	4/13/2002	N001	<0.01	0.038	<0.005	<0.01	0.0046J	<0.0002	<0.01	<0.01
0504	4/17/2002	N001	0.028	0.037	<0.005	0.0028J	0.0038J	<0.0002	<0.005	<0.01
0505	4/17/2002	N001	<0.01	0.02	<0.005	<0.01	0.0044J	<0.0002	<0.005	<0.01
0512	4/16/2002	N001	0.0036J	0.045	<0.005	0.0048J	0.0044J	<0.0002	<0.005	<0.01

^aN001 is an unfiltered sample, 0001 is a filtered sample.

J = Estimated value, result is between the reporting limit and the method detection limit.

*Table 13. Arsenic Concentrations at the WWNA
(reported in milligrams per liter)*

Well	Date	Arsenic
0500	4/16/2002	0.092
0501	4/16/2002	0.7
0502	4/16/2002	0.06
0503	4/13/2002	0.0068J
0504	4/16/2002	<0.01
0505	4/13/2002	0.0056J
0506	4/13/2002	0.0041J
0507	4/13/2002	<0.01
0508	4/16/2002	<0.01
0509	4/13/2002	<0.01
0510	4/13/2002	0.0037J
0511	4/16/2002	<0.01
0512	4/16/2002	<0.01
0513	4/16/2002	<0.01
0514	4/13/2002	0.0047J
0515	4/15/2002	<0.01
0516	4/15/2002	0.0042J
0517	4/13/2002	<0.01
0518	4/13/2002	0.0038J
0519	4/13/2002	0.0042J
0520	4/15/2002	<0.01
0521	4/15/2002	0.0046J
0522	4/15/2002	0.074
0523	4/15/2002	<0.01
0524	4/15/2002	0.022
0525	4/16/2002	0.034
0526	4/16/2002	<0.01
RW02	4/2/2002	0.084
RW02	4/16/2002	0.078
RW02	5/8/2002	0.11
RW02	6/4/2002	0.095
RW03	4/2/2002	0.055
RW03	4/15/2002	0.049
RW03	5/8/2002	0.048
RW03	6/4/2002	0.078

J = Estimated value, result is between the reporting limit and the method detection limit.

Table 14. Summary of Analytical Results for Ground Water Samples Collected at the Northeast Site Treatment System

(reported in micrograms per liter unless otherwise noted)

Location	Date Sampled	cis-1,2-DCE	trans-1,2-DCE	TCE	Methylene chloride	Vinyl chloride	Toluene	Benzene	MTBE	Total VOCs ^a	CaCO ₃ mg/L	Fe mg/L
PIN15		Northeast Site										
INF1	4/2/2002	4,400	<100	790	44J	870	250	<100	<1,000	6,310	460	4.4
INF1	4/17/2002	5,300	<100	1,900	11,000	1,000	670	23J	<1,000	19,870	–	–
INF1	4/25/2002	5,100	32J	1,900	7,900	1,200	580	<100	<1,000	16,680	–	–
INF1	5/8/2002	5,300	<100	1,700	6,600	2,300	600	20J	<1,000	16,500	480	4.4
INF1	5/15/2002	4,400	<100	2,000	8,200	730	350	<100	<1,000	15,680	–	–
INF1	5/21/2002	4,500	<100	1,600	5,400	1,200	<100	30J	<1,000	12,870 ^b	520	5.6
INF1	6/4/2002	5,200	<100	2,800	8,800	730	260	<100	<1,000	17,790	430	4.5
EFF1	4/2/2002	<1	<1	<1	0.31J	<1	<1	<1	<10	29 ^b	410	3.7
EFF1	4/17/2002	<1	<1	<1	<5	<1	<1	<1	<10	11 ^b	–	–
EFF1	4/25/2002	<1	<1	<1	0.42J	<1	<1	<1	<10	10 ^b	–	–
EFF1	5/8/2002	<1	<1	<1	<5	<1	<1	<1	<10	ND	470	4.2
EFF1	5/15/2002	<1	<1	<1	<5	<1	<1	0.15J	<10	ND	–	–
EFF1	5/21/2002	<1	<1	<1	<5	<1	<1	<1	<10	ND	490	4
EFF1	6/4/2002	<2.5	<2.5	<2.5	1.2J	<2.5	<2.5	<2.5	<25	110 ^b	430	5.4

^a"J" values are not included in the "Total VOCs" value.

^b Total VOCs value includes compounds not listed.

J = Estimated value, result is between the reporting limit and the method detection limit.

– = Not Measured

Table 15. Estimated Mass of VOCs Recovered from the Northeast Site and Building 100 Recovery Wells During April, May, and June 2002

Month	Volume Treated (gallons)	Concentration ^a						
		cis-1,2-DCE (µg/L)	trans-1,2-DCE (mg/L)	Toluene (µg/L)	TCE (µg/L)	Methylene Chloride (µg/L)	Vinyl Chloride (µg/L)	Total VOCs (µg/L)
April 2002	694,886	4,933	44	500	1,530	6,315	1,023	14,345
May 2002	756,731	4,733	50	333	1,767	6,733	1,410	15,027
June 2002	667,547	5,200	50	260	2,800	8,800	730	17,840

Month	Volume Treated (gallons)	Recovery ^b						
		cis-1,2-DCE (lbs)	trans-1,2-DCE (lbs)	Toluene (lbs)	TCE (lbs)	Methylene Chloride (lbs)	Vinyl Chloride (lbs)	Total VOCs (lbs)
April 2002	694,886	28.6	0.3	2.9	8.9	36.6	5.9	83.2
May 2002	756,731	29.9	0.3	2.1	11.2	42.5	8.9	94.9
June 2002	667,547	29.0	0.3	1.4	15.6	49.0	4.1	99.4

^aThese concentrations represent the average of weekly sampling results.

^bIncludes "J" (estimated) values. For any detection of "<", which indicates the laboratory could not detect that analyte, 50 percent of the "<" value was used for the calculation of recovery.

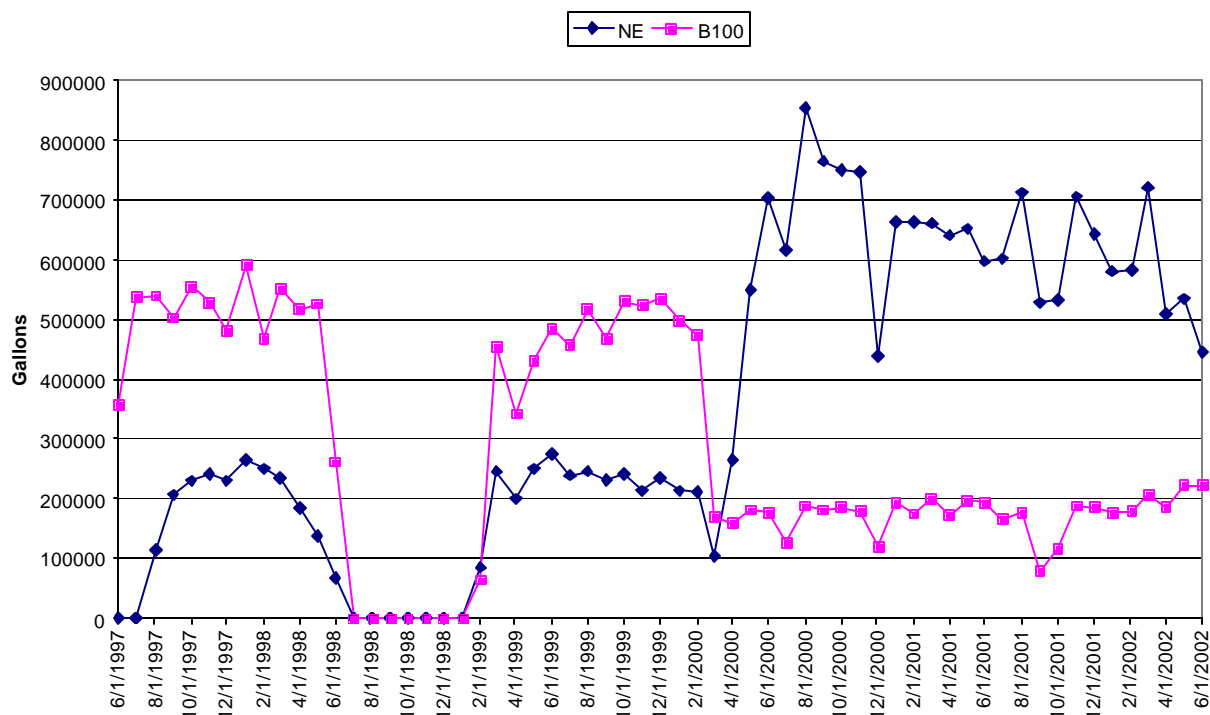


Chart 1. Historical Northeast Site and Building 100 Ground Water Recovery

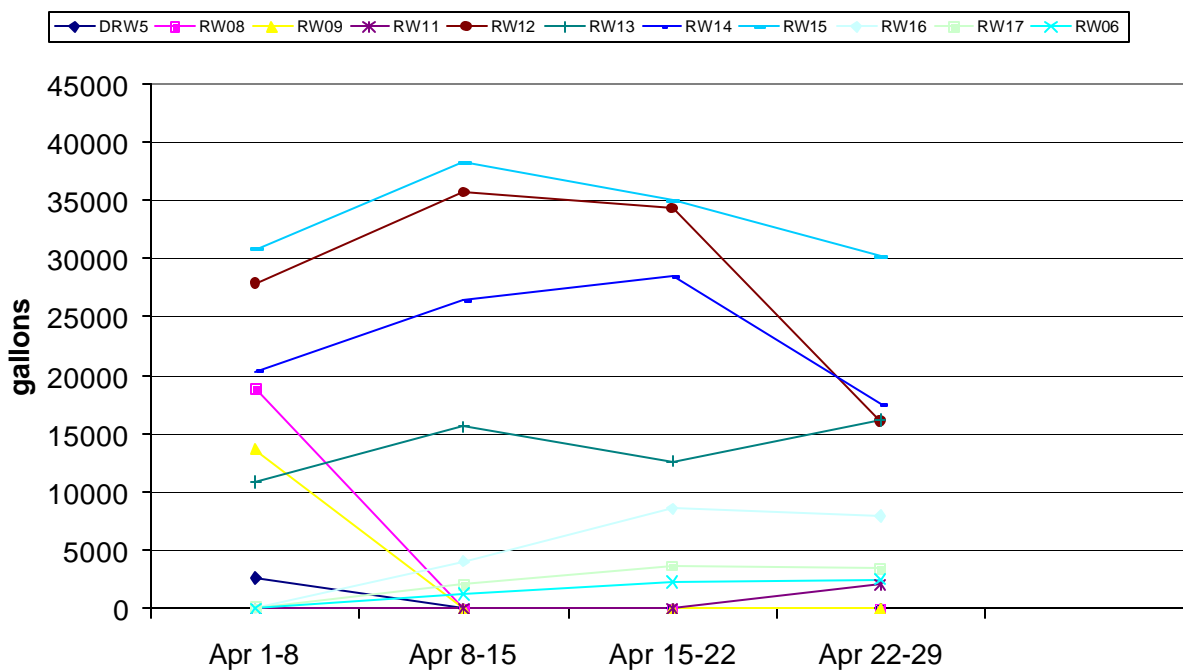


Chart 2. April 2002 Northeast Site (Individual Wells) Ground Water Recovery

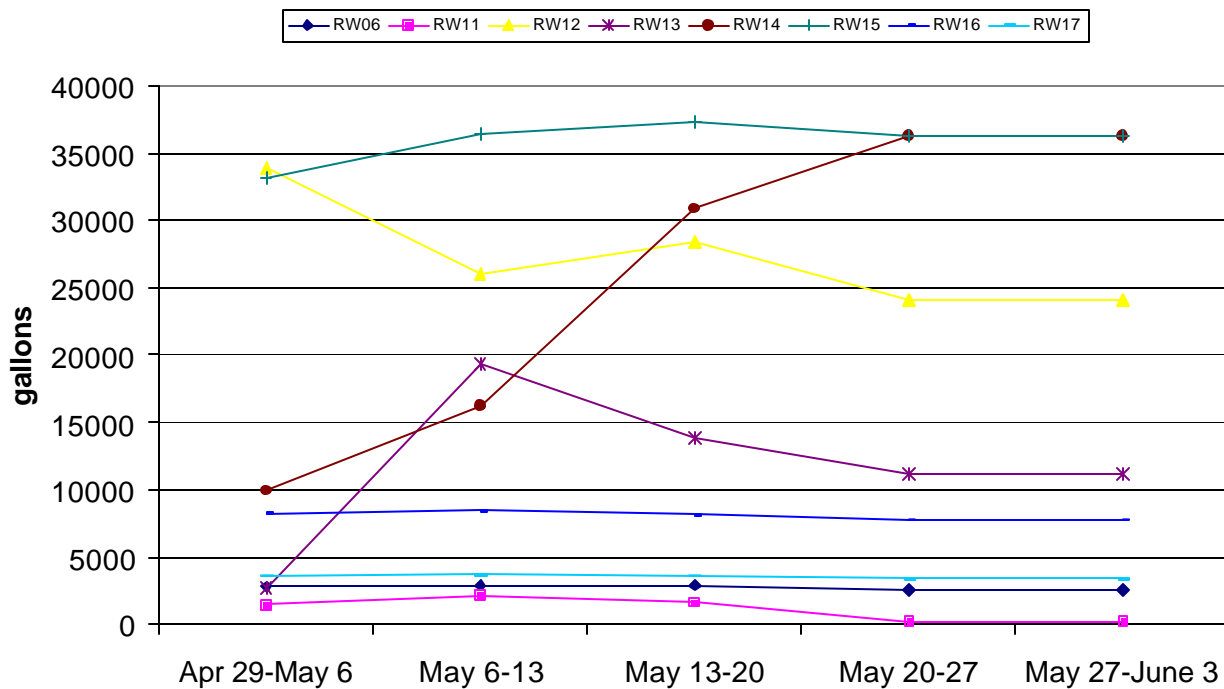


Chart 3. May 2002 Northeast Site (Individual Wells) Ground Water Recovery

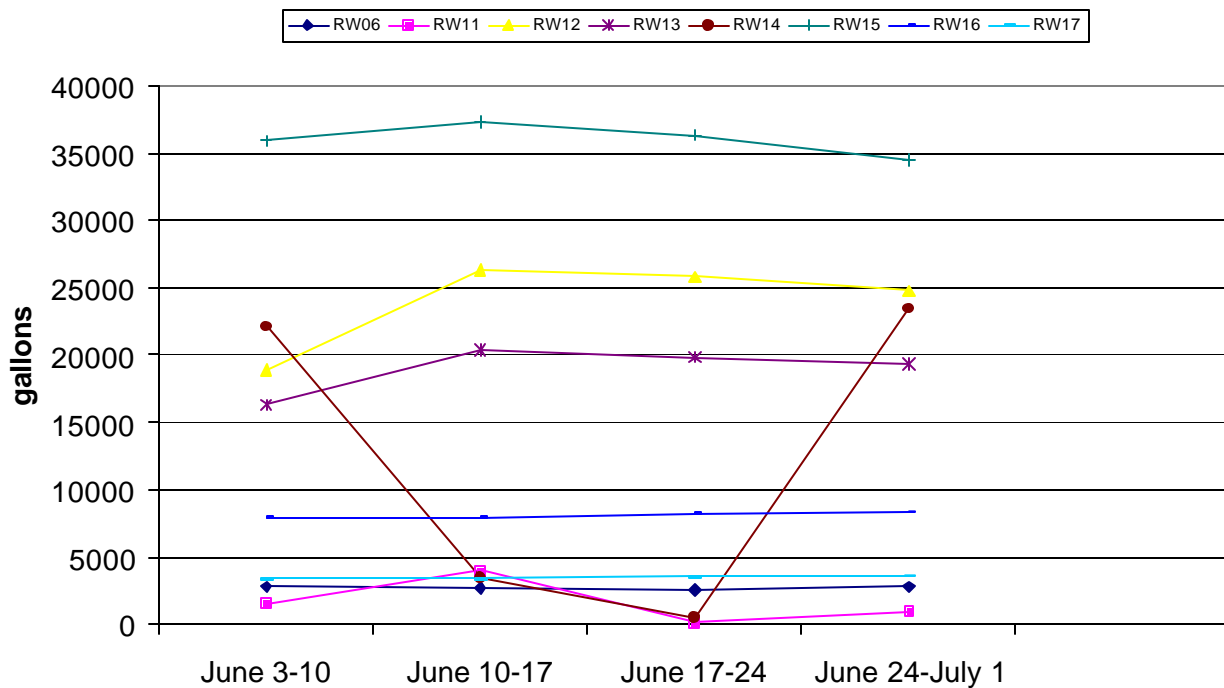
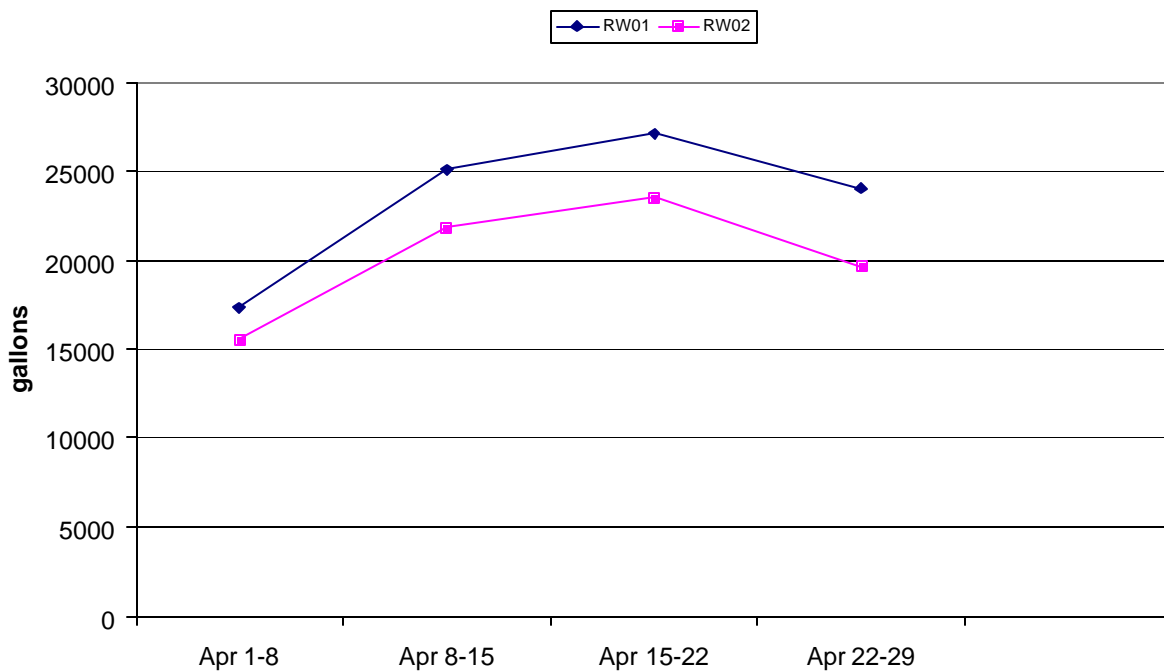
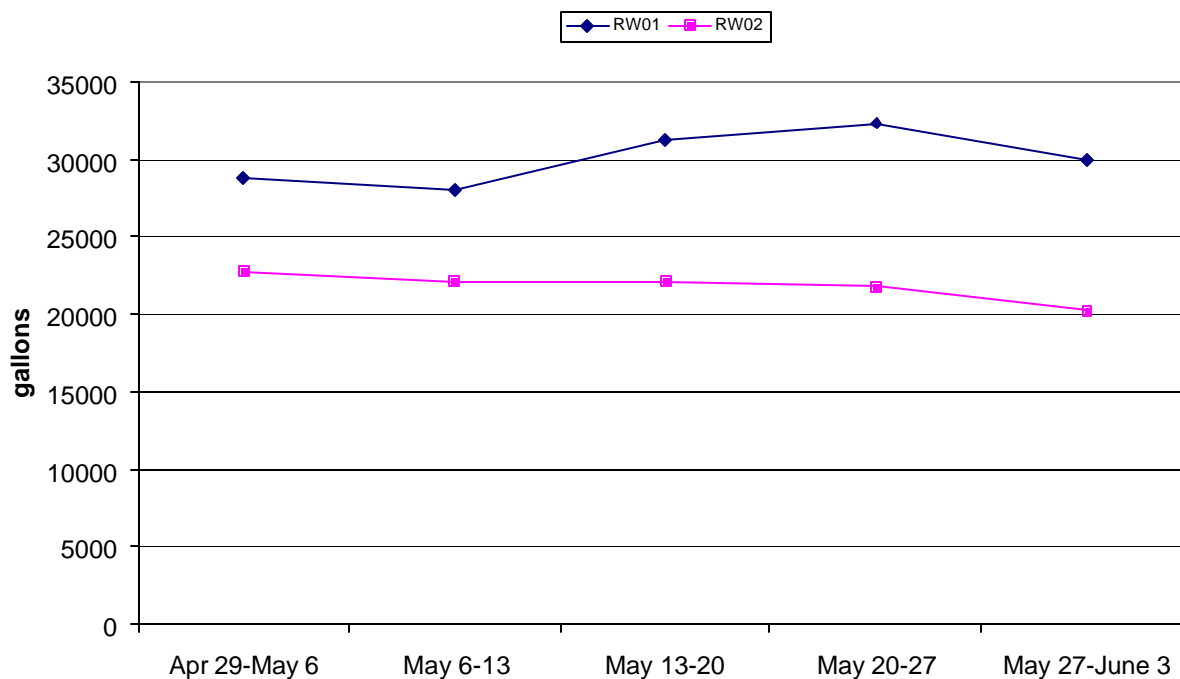


Chart 4. June 2002 Northeast Site (Individual Wells) Ground Water Recovery

*Chart 5. April 2002 Building 100 Ground Water Recovery**Chart 6. May 2002 Building 100 Ground Water Recovery*

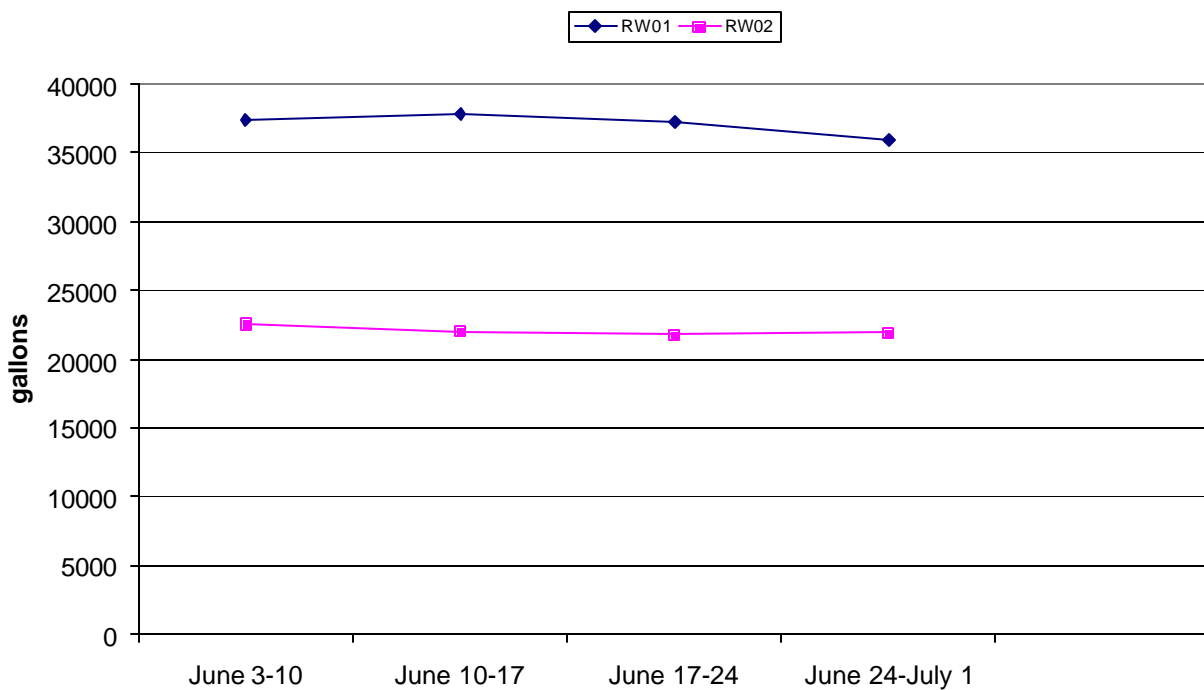


Chart 7. June 2002 Building 100 Ground Water Recovery

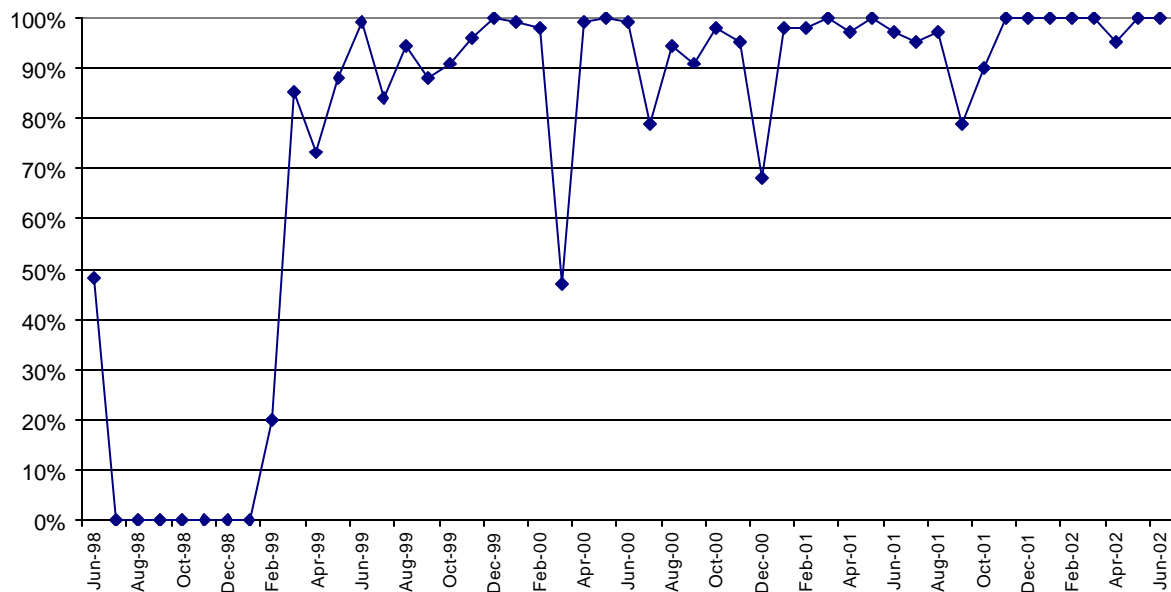


Chart 8. Historical Northeast Site Air Stripper—Percent Time On-Line

Appendix A

Laboratory Reports—April 2002 Quarterly Results

Table A–1. Relative Percent Difference (RPD) for Duplicate Samples

Sample ID	Duplicate ID	Case Number	Constituent	S ^a	D ^b	RPD Value	5 times DL ^c	Fail ^d
PIN12–0516	PIN12–0582	B211475	Barium	0.048	0.047	2.1	0.05	
			Chromium	0.0021	0.005	81.7	0.05	
			Lead	0.0062	0.0064	3.2	0.025	
PIN12–0522	PIN12–0583	B211473	Arsenic	0.005	0.0052	3.9	0.05	
			Barium	0.033	0.031	6.3	0.05	
			Lead	0.0051	0.0053	3.8	0.025	
			Methylene chloride	0.51	0.53	3.8	25	
PIN12–S67C	PIN12–0581	B211458	1,1-Dichloroethane	23	27	16.0	50	
			1,1-Dichloroethene	1.4	1.4	0.0	50	
			Arsenic	0.0033	0.005	41.0	0.05	
			Barium	0.051	0.05	2.0	0.05	
			Chromium	0.0034	0.0032	6.1	0.05	
			cis-1,2-Dichloroethene	440	430	2.3	50	
			Lead	0.0055	0.0057	3.6	0.025	
			trans-1,2-Dichloroethene	64	72	11.8	50	
PIN12–S70D	PIN12–0580	B211427	Vinyl chloride	240	320	28.6	50	
			1,1-Dichloroethane	0.48	0.56	15.4	5	
			Barium	0.057	0.056	1.8	0.05	
			Chromium	0.0094	0.0086	8.9	0.05	
			cis-1,2-Dichloroethene	7	6.3	10.5	5	
			Lead	0.0068	0.0067	1.5	0.025	
			Methylene chloride	0.88	0.37	81.6	25	
			trans-1,2-Dichloroethene	1.2	0.86	33.0	5	
PIN15–0557	PIN15–0584	B211552	Vinyl chloride	1.2	1.1	8.7	5	
			Chloroethane	2.1	2.2	4.7	5	
PIN15–M12D	PIN15–0582	B211553	Nondetect					
PIN15–M31D	PIN15–0583	B211573	Benzene	11	11	0.0	25	
			cis-1,2-Dichloroethene	180	90	66.7	25	Fail
			Methylene chloride	12.5	7	56.4	125	
			Toluene	4.4	5	12.8	25	
			Vinyl chloride	520	380	31.1	25	Fail
PIN15–M32D	PIN15–0581	B211524	1,1-Dichloroethane	0.13	0.13	0.0	5	
			Benzene	3.1	3.2	3.2	5	
			Methylene chloride	2.5	2.7	7.7	25	
			trans-1,2-Dichloroethene	2.2	0.5	125.9	5	
			Trichlorofluoromethane	2.4	0.22	166.4	5	

Table A-1. Relative Percent Difference (RPD) for Duplicate Samples

Sample ID	Duplicate ID	Case Number	Constituent	S ^a	D ^b	RPD Value	5 times DL ^c	Fail ^d
PIN15-RW15	PIN15-0580	B211525	Benzene	12.5	12	4.1	125	
			cis-1,2-Dichloroethene	1,300	1,300	0.0	125	
			Ethylbenzene	12.5	4.4	95.9	125	
			m,p-Xylene	12.5	9.6	26.2	125	
			o-Xylene	12.5	4.5	94.1	125	
			Toluene	12.5	11	12.8	125	
			trans-1,2-Dichloroethene	12.5	8.4	39.2	125	
			Trichloroethene	1,800	1,700	5.7	125	
			Vinyl chloride	590	390	40.8	125	Fail
PIN18-0502	PIN18-0651	B211494	Arsenic	0.06	0.06	0.0	0.05	
			Methylene chloride	0.85	0.45	61.5	25	
PIN18-0519	PIN18-0650	B211473	Arsenic	0.0042	0.0045	6.9	0.05	
			Benzene	0.71	0.75	5.5	5	
			Methylene chloride	2.5	0.32	154.6	25	

^aS = Original sample (N001), VOC concentrations in µg/L and metals in mg/L.^bD = Duplicate sample (N002), VOC concentrations in µg/L and metals in mg/L.^cDL = Detected limit.^dFail is an RPD greater than " 30% and original or duplicate result more than 5 times the detection limit. F=fail.

Appendix B

Laboratory Reports for Northeast Site Treatment System—April to June 2002

Appendix C

Laboratory Reports for WWNA—April to June 2002

Appendix D

Analytical Results for Special Sampling Events

Appendix E

Northeast Site Treatment System Historical Data Table

Table E-1. Historical Summary of Ground Water Recovery at the Northeast Site and Building 100

Report Date	Quarterly (gallons)	Total To Date (gallons)
April-June 1997	356,886	356,886
July-September 1997	1,899,871	2,256,757
October-December 1997	2,265,460	4,522,217
January-March 1998	2,358,081	6,880,298
April-June 1998	1,693,697	8,573,995
July-September 1998	0	8,573,995
October-December 1998	0	8,573,995
January-March 1999	848,912	9,422,907
April-June 1999	1,985,705	11,408,612
July-September 1999	2,158,568	13,567,270
October-December 1999	2,285,471	15,852,741
January-March 2000	1,670,059	17,522,801
April-June 2000	2,031,821	19,554,622
July-September 2000	2,728,441	22,283,063
October-December 2000	2,416,705	24,699,768
January-March 2001	2,977,868	27,677,636
April-June 2001	2,452,063	30,129,699
July-September 2001	2,262,233	32,391,932
October-December 2001	2,374,065	34,765,997
January-March 2002	2,449,505	37,215,502
April-June 2002	2,119,164	39,334,666

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